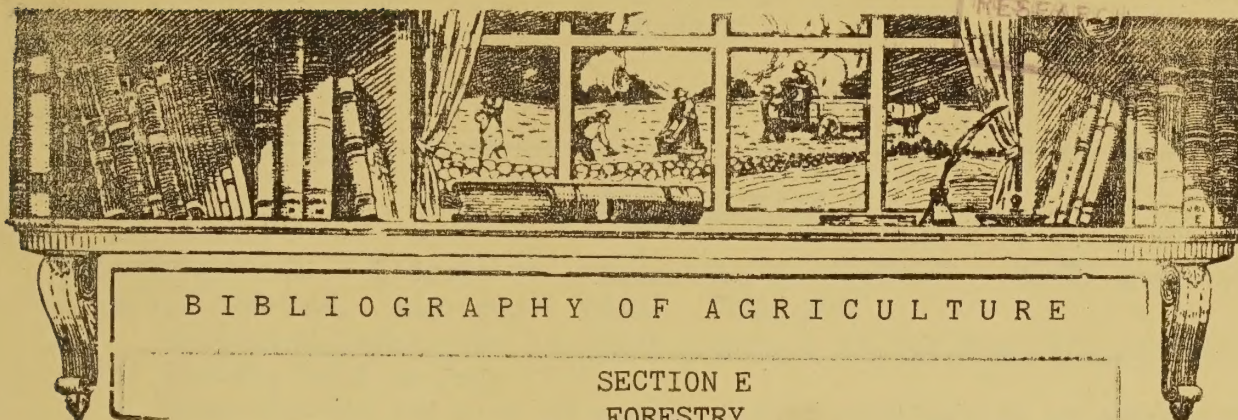
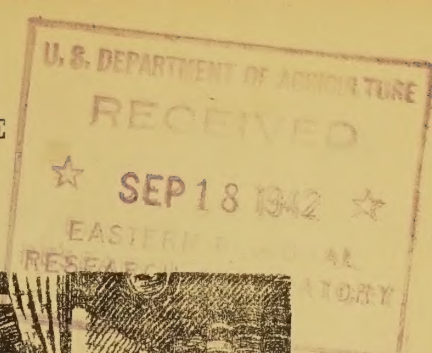


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BIBLIOGRAPHY OF AGRICULTURE  
SECTION E  
FORESTRY

Vol. 1

July - August 1942

Nos. 1-2

GENERAL FORESTRY

- BELANGER, C. E. L'école et l'éducation forestière. Forêt Québécoise 4(7): 339-344. Aug.-Sept. 1942. 99.8 F79  
Presented before the regional congress of the Forestry Association of Quebec, held on July 15-16.  
Suggests the teaching of proper forest utilization in schools from the lowest through teacher-training schools so that students may understand the value of forest resources and their influence on economic life.
- HOYLE, RAYMOND J. Are forestry schools properly training men for private forestry and industry? Jour. Forestry 40(6): 485-489. June 1942. 99.8 F768  
Broader curricula stressing various phases of forest utilization, as well as tree growing and land management, should be set up in forestry schools.
- MULFORD, WALTER. The professional attitude of foresters. Duke Univ. School Forestry Lectures 2, 13 pp. Durham, May 1941. 99.9 D88S  
Address at the School of Forestry, Duke University, May 19, 1941.  
Traces the development of a professional attitude in forestry, and discusses the scope of the profession and elements necessary for its proper conduct.
- U. S. FOREST SERVICE. Kaniksu national forest Idaho, Montana and Washington. 1942. Map 1 F765Ma Kaniksu 1942.
- WISCONSIN. DEPT. OF AGRICULTURE. DIV. OF LAND ECONOMIC INVENTORY AND LAND USE. Forests and land use. Wis. Dept. Agr. Div. Land Econ. Inventory & Land Use. Bul. 229, 56 pp. Madison, 1942. 2 W752Bu  
A well-rounded view of forests and forestry in Wisconsin, telling the story of the past and present forest land use, the trend in agriculture and the recommended land use of the future. Forest resources, pathology, entomology, fire control measures, and influences are all considered as a part of the Wisconsin forest question.

FOREST ADMINISTRATION AND POLICY

- DICKERMAN, M. B. The cooperative association as a wartime aid to the small producers of forest products. U. S. Forest Serv. Lake States Forest Expt. Sta. Econ. Note 18, 49 pp., processed. St. Paul, 1942. 1.9 F7625E  
This report points out some of the principal considerations in organizing and developing forest product cooperative associations. Such associations have proved effective in solving problems of agricultural producers who are limited by financial resources, inadequate equipment and unfamiliarity with war needs in operating at full capacity or engaging to any large degree in war production.



HALL, J. ALFRED. Lumber for midwest farmers. Mo. Farmer 34(14): 4.  
July 15, 1942. 6 M696

Suggests using one of two remedies for the unregulated cutting and poor management of the virgin forests of the Middle West, government regulation or government ownership of timber lands.

KNUCHEL. Ausdehnung des ackerbaues und waldrodung. Schweiz. Stschr. f. Forstw. 93(4/5): 111-117. Apr./May 1942. 99.8 Sch9

Considerations on the clearing of forests and extension of cultivation of the land in Switzerland. A table shows progress up to January 31, 1942.

LYON, A. B. The co-operative farm forestry project. South. Lumberman 165(2072): 42. Aug. 1, 1942. 99.81 So82

The farm forester of the Thomas Jefferson Cooperative Farm Forestry Project, Charlottesville, Va., discusses the purpose, methods of operation and probable benefits of the cooperative farm forestry project.

MOORE, E. B. Developing private forestry in New Jersey. Jour. Forestry 40(5): 388-392. May 1942. 99.8 F768

MULFORD, WALTER. American forest policy as influenced by the present international situation. Duke Univ. School Forestry Lectures 3, 15 pp. Durham, May 1941. 99.9 D88S

Tells the story of the American forest policy, 1492-1941, describing it as having progressed less than halfway from zero toward the goal of a reasonable degree of effectiveness, and presents impartial viewpoints on public versus private regulation of forest lands particularly as influenced by the present international situation.

NELSON, ALF Z. The consumer's stake in the regulation of forest land. Jour. Forestry 40(6): 379-383. May 1942. 99.8 F768

OLZENDAM, RODERIC. We are growing trees. Jour. Forestry 40(5): 393-397. May 1942. 99.8 F768

Paper, presented at the 23rd annual meeting of the Pacific Logging Congress, Seattle, Washington, Oct. 22, 1941, of interest to both proponents and opponents of public regulation of forests.

ROGERS, NELSON S. Who shall regulate our forests? Jour. Forestry 40(5): 384-387. May 1942. 99.8 F768

The state forester of Oregon discusses what the regulatory law of that state is designed to accomplish, and how it works.

TOMASEK, ANTON J. Illinois Department of conservation, Division of forestry. Ames Forester 30: 49-52. 1942. 99.9 Io94

Contents: Reforestation; Forest fire protection; Woodland management; State forests; Community forests.

WOHLENBERG, E. T. F. Four years of private forestry in the West. Jour. Forestry 40(5): 376-378. May 1942. 99.8 F768

"Reviews the progress made in private forestry in the West during the past four years, and proposes that progressive leaders in the U. S. Forest Service and in the lumber industry attempt to determine if some common, mutually advantageous course of action cannot be found."

#### FOREST FIRE PROTECTION

BOSWORTH, JAMES. Have we gone far enough in the use of airplanes? U. S. Forest Serv. Fire Control Notes 6(3): 95-99, 102. July 1942. 1 F766F1

Advocates an "all out" application of the use of airplane-parachute method of transporting firemen for attack on forest fires on a full



national-forest basis, indicating savings in personnel, improvements, and transportation costs, reduction in damage values, and savings in time.

BYRAM, GEORGE M. Filters for penetrating atmospheric haze. Jour. Forestry 40(7): 530-532, July 1942, 99.8 F768

The Appalachian Forest Experiment Station has made studies during the past year of a polarizing screen or combination polarizing screen and red filter (referred to as a "haze cutter") which penetrates haze to a much greater degree than any kind of color filter used alone. The application and effectiveness of the "haze cutter" in forest fire detection are discussed.

CAROMELLO, PETER J. Carpet grass sod on forest roads. U. S. Forest Serv. South. Forest Expt. Sta. South. Forestry Notes 45, 1 p., processed. New Orleans, 1942. 1.9 F7624S

Acts as an effective barrier to spread of fire and reduces possibility of serious soil erosion.

FENTON, EDWARD. Forest of tomorrow. Nature Mag. 37(7): 370-372. Aug.-Sept. 1942. 409.6 N214

In its effort to demonstrate that it is commercially practical for private enterprise to grow timber as a crop on cut-over lands, the Weyerhaeuser Timber Co. in Washington State practices tree farming on a large scale and has devised a fire prevention and control system which rivals the set-up of a panzer division for thoroughness and efficiency.

FENTON, EDWARD J. Lightning over the forest. Amer. Forests 48(8): 350-352, 384. Aug. 1942. 99.8 F762

The newest development of the Weather Bureau in predicting not only where and when thunderstorms will occur, but at what elevations they are most likely to strike is of great importance to forest fire fighters, particularly now when the forests are contributing heavily to the war effort.

GISBORNE, H. T. Mileposts of progress in fire control and fire research. Jour. Forestry 40(8): 597-608. Aug. 1942. 99.8 F768

Paper presented before the U. S. Forest Service Fire Control Research Meeting held at Priest River, Idaho on Dec. 1-6, 1941, in which the author gives his selection of the outstanding events in the development of forest-fire control in the United States for the past thirty-five years. Comment by Roy Headley, U. S. Forest Service, pp. 607-608.

HESSEL, J. N. Fires in Alaska. U. S. Forest Serv. Fire Control Notes 6(3): 86-91. July 1942. 1 F766Fi

Forest fire fighting in Alaska shows a lack of labor, money and specialized equipment.

JEMISON, GEORGE M. The measurement of forest fire danger in the eastern United States and its application in fire prevention and control. U. S. Forest Serv. Appalachian Forest Expt. Sta. Tech. Note 50, 59 pp., processed. Asheville, N. C., 1942. 1.9 F7623T

This progress report and an earlier one (Technical Note 34, 1940) were both prepared to supply detailed information on fire danger rating, what it is, how it may be used, where instruments may be purchased, how danger stations should be installed and operated, etc.

The danger rating system has been tested extensively since the issuance of the earlier report, and the methods suggested here represent the best procedures determined to date at the 264 stations now in active operation.



McINTYRE, ROBERT N. The variable lick method; an approach to greater efficiency in the construction of fire-control line. Jour. Forestry 40(8): 609-614. Aug. 1942. 99.8 F768

The variable lick method is an outgrowth of experiments undertaken in 1936 with a 40-man C. C. C. crew on the Snoqualmie National Forest. It has subsequently been tested with fire-fighting crews of different sizes in both eastern and western Washington.

WAGSTAFF, A. J. Firebreak prevents larger fires. U. S. Forest Serv. Fire Control Notes 6(3): 114-115, 127. July 1942. 1 F766F1

Discusses two years of operation of a firebreak in the Uinta National Forest.

### FOREST INFLUENCES

AYLEN, DOUGLAS. Gully control; some recent successes. Rhodesia Agr. Jour. 39(2): 73-87. Mar.-Apr. 1942. 24 R34

Lists trees useful in gully control, pp. 85-86.

BENNETT, H. H. Forestry in the southern conservation problem. South. Pulp and Paper Jour. 5(2): 6-10, 14-17. July 1942. 302.8 So8

Address before the Southern Association for the Advancement of Science held in Atlanta, Georgia, Apr. 2, 1942.

Using statistics taken from land-use capability surveys of ten southern states, Dr. Bennett points out that many million acres of the land now in crops should be used for forestry purposes as a part of a good program of soil and water conservation and proper land use. He urges the prevention of forest fires and the control of destructive logging.

BENNETT, H. H. Woodlands and soil conservation. Ames Forester 30: 1-6. 1942. 99.9 I094

Discusses the most effective erosion control practices and the accomplishments which any good soil conservation plan should afford.

GUTHRIE, JOHN D. Trees, people, and foresters. Jour. Forestry 40(6): 477-480. June 1942. 99.8 F768

The author gives his opinion of the success of the Prairie States Forestry Project, begun in 1934 in six states from North Dakota through the Texas Panhandle, after six years of growth.

LUCRETIIUS. War, wealth and water. Forest and Bird 64: 15-16. May 1942. 413.9 N42

A plea for the conservation of New Zealand's water supply, native forests, and other natural vegetation.

U. S. SOIL CONSERVATION SERVICE. NORTHERN GREAT PLAINS REGION. Save your soil. Tree shelterbelts or windbreaks helpful on the Northern great plains in a conservation program for your farm or ranch. U. S. Soil Conserv. Serv. North. Great Plains Reg. Conserv. Fold. 12, folder. Washington, 1942. 1.6 So39C

WHEELER, GEORGE R. Conservation in wartime. Mich. Conserv. 11(7): 10-11. July-Aug. 1942. 279.9 M582

Both from the standpoint of timber and of recreation, the forest lands must be saved from forest fires and from wasteful clearing.

### FOREST MANAGEMENT

BEVAN, ARTHUR. Farm forestry in Puerto Rico. Rev. de Agr. de Puerto Rico 34(1): 79-81. Jan.-Mar. 1942. 8 E325



The 1935 census shows that 376.979 cuerdas or 17.8 per cent of the total land area in Puerto Rico is in forest, woodland pasture or brush. With a program of farm forestry established it is possible that woodlots can supply the Island with all wood for charcoal, stakes, and fence posts.

DAVIS, KENNETH P. Economic management of western white pine forests. U. S. Dept. Agr. Tech. Bul. 830, 78 pp. Washington, D. C., Aug. 1942. 1 Ag84Te

"This study is divided into four parts. The first considers the best forest rotation and criterion of regulatory and economic policy. The second analyzes four types of forest stands exemplifying major silvicultural problems in the region to bring out the relative desirability of various silvicultural methods. The third gives a concrete account of past and present forest practices in a representative part of the region. National-forest and private cutting practices and the critical and dominating problems of protecting the white pine forests from fire, insects and disease are considered. The fourth section brings the entire study together through an integrated analysis of the costs and returns of timber growing based on two specific alternative timber-management plans."

GRENEKER, EUGENE F. Farming the gum forests. Nation's Agr. 17(6): 4, 13. June 1942. 280.82 B89

Discusses the geographic location of the Gum Belt, valuation of the nation's gum crop, methods of farming for gum, use of commodities obtained, and gum farmers' quota for 1942.

HURSH, C. R. Naturalization of road banks; an integral part of highway construction. Roads and Bridges 80(7): 22-26, 131-137. July 1942. 290.8 C16A

In 1934 a study of stabilization treatments was begun by the Appalachian Forest Experiment Station in testing different methods suitable for national forest roads and truck trails. These experiments have resulted in the working out of certain principles of road-bank stabilization and naturalization measures to encourage a permanent natural cover of local shrubs and trees.

IOWA. STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS. EXTENSION SERVICE. Soil-building practices in the 1941 AAA program as they apply to Iowa. Pam. 4, 16 pp. Ames, 1941. 275.29 Io9Pa

Forestry, pp. 10-14. The usefulness of woodlots and windbreaks on farms is pointed out with recommendations of varieties of suitable trees for these purposes in Iowa.

LIEFELD, T. A. Acid treatment of naval stores pine to stimulate gum yield. U. S. Forest Serv. South. Forest Expt. Sta. South. Forestry Notes 45, p. 2, processed. New Orleans, 1942. 1.9 F7624S

Sulphuric acid increased gum yields from slash pine up to 73 percent in the 10-week period reported by the Olustee (Fla.) Experimental Forest from 1941 studies.

MCCORMICK, L. E., BOWEN, C. M., and CLARK, MARION W. Tree planting for erosion control. Mo. Agr. Col. Ext. Manual 13, 4 pp., processed. Columbia, 1941. 275.29 M69Ma

Choice of species, where trees should and should not be planted for erosion control, protection from grazing, and use of fertilizers are main topics discussed.



- MEEMAN, EDWARD J. Editor explains importance of forests, farm woodlots in war. Tenn. Conserv. 6(7): 3, 14. July 1942. 410 T252
- NEILSON, H. Early English woodland and waste. Jour. Econ. Hist. 2(1): 54-62. May 1942. Bibliographical foot-notes. 277.8 J822

On the extent and uses of forest and other unoccupied and untilled lands in medieval England, including discussions of early forest administration.

- POTLATCH FORESTS, INC. Forest management ... with special reference to Clearwater county, Idaho. Jour. Forestry 40(5): 364-370. May 1942. 99.8 F768

Contents: Prospects and policies, by C. L. Billings, pp. 364-365; Cutting practices, by E. C. Rettig, pp. 366-367; Slash disposal, by John T. Baggs, pp. 367-368; The road ahead, by E. F. Rapraeger, pp. 369-370.

- QUEVEDO, M. A. de. La iniciación de la campaña de protección forestal del territorio nacional y sus desarrollos sucesivos y tropiezos. Mex. Forest. 19(7/8): 67-76. July-Aug. 1941. 99.8 M57

The initiation of the forest protection campaign in the national territory and its successive developments and failures [in Mexico].

- RICHEY, A. L. Farm forestry in the Farm security administration program. Region 1, Northeastern states. U. S. Farm Security Admin. Reg. 1. Bul. 54, 50 pp., processed. Upper Darby, Pa., 1942. 1.9501 B87

Discusses value of crop produced by the farm woodland, and management of the woodland as part of the operation of the farm.

- SMITH, CLYDE T. The Central counties' shelter belt program. Wis. Conserv. Bul. 7(7): 15-16. July 1942. 279.8 W752

Central Wisconsin farmers have planted 4,295 miles of three-row shelter belts in 1935-1942 inclusive.

- TINDALL, CORDELL. Take a look at tree farming. Mo. Ruralist 83(14): 6, 12. July 11, 1942. 6 R8891

On woodland management for small farms.

- WILSON, ELLWOOD. Reviewing 40 years of forest conservation. Pulp and Paper Mag. Canada 48(8): 631-632. July 1942. 302.8 P96

Some progress in conservation measures has been made, but forests are still generally regarded as timber mines rather than timber farms.

#### HARVEST CUTTINGS AND STAND IMPROVEMENTS

- FROTHINGHAM, E. H. Twenty years' results of plantation thinning at Biltmore, N. C. Jour. Forestry 40(6): 444-452. June 1942. 99.8 F768

Results appear to have been generally advantageous both from standpoint of volume growth and quality.

- HEIBERG, SVEND O. Cutting based upon economic increment. Jour. Forestry 40(8): 645-651. Aug. 1942. 99.8 F768

Cites economic increment charts for eastern white pine and hemlock on Pack Forest in the Adirondacks as examples to show that merchantable trees left by timber markers must be economically justifiable and have an increase in value at an acceptable rate of interest.

- PEARSON, G. A. Rehabilitation of cut-over pine stands in the Southwest. Ames Forester 30: 23-43. 1942. Literature cited, p. 41. 99.9 I094

Outlines conditions and treatment on several areas where rehabilitation of cut-over stands has taken place. Stand improvement accompanied by other measures of good management is recommended for obtaining higher yield and higher prices.



STOTT, CALVIN B. Comparison of logging costs with clear-cutting and several intensities of selective thinning in northern Minnesota jack pine. Jour. Forestry 40(7): 544-551. July 1942. 99.8 F768

Describes a detailed study of three varying degrees of silvicultural cut and one clear cut made in 1937 on an area of selected timber within the George Washington State Forest, Itasca County, Minnesota. Conclusions set forth pertain to methods of cutting, season of operation, species, age class, site quality, ownership, logging chance, and type of product.

### PLANTING

WILDE, S. A., and ALBERT, A. R. Effect of planting methods on survival and growth of plantations on well-drained sandy soils of central Wisconsin. Jour. Forestry 40(7): 560-562. July 1942. 99.8 F768

A number of methods of tree planting have been investigated at the Hancock Branch Experiment Station at Hancock, Wisconsin, during the past five years. The results of five methods, shallow furrow planting, deep furrow planting, furrow slice planting, slit planting and hole planting, are reported in this paper.

YORK, HARLAN H., and LITTLEFIELD, E. W. The naturalization of Scotch pine, northeastern Oneida county, N. Y. Jour. Forestry 40(7): 552-559. July 1942. Bibliography, pp. 558-559. 99.8 F768

Describes an interesting and successful case of naturalization which originated from plantations of Scotch pine established in central New York 60-70 years ago.

### FOREST MEASUREMENTS

ADAMS, W. R., and CHAPMAN, G. L. Crop tree measurements in thinning experiments. Jour. Forestry 40(6): 493-498. June 1942. Literature cited, p. 498. 99.8 F768

Includes tables showing tree development from density of stocking in 28-year old plantations for jack pine, red pine and northern white pine; tables showing diameter and area increment for crop trees and all trees per acre of white pine, 1927-1940.

CANDY, R. H. Forest growth on the Upper Lievre valley, P. Q. Canada. Forest Serv. Silv. Res. Note 71, 25 pp., processed. Ottawa, 1942. 99.9 C16Re

Presents and compares the results of two rate-of-growth surveys (1930 and 1941) of forest stands in the Upper Lievre Valley.

COOPER, WILLIAM E. A common denominator method of estimating timber. Jour. Forestry 40(5): 397-400. May 1942. 99.8 F768

GLOCK, WALDO S. A rapid method of correlation for continuous time series. Amer. Jour. Sci. 240(6): 437-442. June 1942. 470 Am34

"A 'trend method' of correlation has been devised for use with continuous time series. It possesses the advantages of simplicity and speed over the standard method now employed. Extensive tests by both methods on rainfall-tree growth data have shown the new method to be equally suitable for indicating possible relationships. In addition, the trend method includes the calculation of an index to reveal the presence of a few fluctuations of great intensity if such exist in the data."



LANGSAETER, A. Produksjonsundersokelser i granskog. Tidsskr. for Skogbruk. 49(11): 333-340. Nov. 1941. 99.8 T432

Production investigations in spruce forests with six yield tables.

MACON, JOHN W., and GEVORKIANTZ, S. R. Estimating volume on the spot. Jour. Forestry 40(8): 652-655. Aug. 1942. 99.8 F768

While investigating numerous possibilities of short-cutting reconnaissance surveys in the Lake States, the authors have developed a cumulative-volume tally form which, by combining the functions of both tally sheet and volume table, offers a practical method of making quick and reliable estimates of timber volume directly in the woods.

RAY, R. G. Site-types and rate of growth at Lake Edward, Champlain co., P. Q., 1915-1936. (A report on the line-plot surveys of 1924-26 and 1936.) Canada. Forest Serv. Silv. Res. Note 65, 63 pp., processed. Ottawa, 1941. References, pp. 60-61. 99.9 C16Re

Summarizes the result of an important investigation of forest growth on a typical area of eastern Canada and presents findings on the potentialities of the region.

SCHULMAN, EDMUND. Variations between ring chronologies in and near the Colorado river drainage area. Tree-Ring Bul. 8(4): 26-32. Apr. 1942. 99.8 T713

Increment borings obtained from selected, living trees during 1939-1942 from the area lying between the eastern limits of the Rocky Mountains and about 113' W. longitude, and from the Mexican border to northern Wyoming, form the basis for the discussion here.

SHIRLEY, HARDY L., and ZEHNGRAFF, PAUL. Height of red pine saplings as associated with density. Ecology 23(3): 370. July 1940. 410 Ec7

A detailed study made in 1934 in the Chippewa National Forest of a stand of pines 16 to 18 years of age indicated that 37 per cent of the variation in height is due to spacing or factors associated with spacing, and that density may have influenced growth indirectly by modifying the soil.

#### FOREST RECREATION

ELLISON, LINCOLN. Trends of forest recreation in the United States. Jour. Forestry 40(8): 630-638. Aug. 1942. Literature cited, pp. 637-638. 99.8 F768

Traces the development of forest recreation in the United States from the time it was first recognized as a social phenomenon in the late nineteenth century to the present.

#### FOREST RESOURCES

ALBERT, J. N. Étude sur le problème agricole du Bas St.-Laurent. Forêt Québécoise 4(7): 348-374. Aug.-Sept. 1942. 99.8 F79

Presented before the regional congress of the Forestry Association of Quebec, held on July 15-17.

Stresses the importance of the forests in the agricultural problem of Bas St.-Laurent, and the necessity for using conservation measures.

BOUDIN, FERNAND. L'importance de la forêt dans l'économie de la province de Québec. La Forêt Québécoise 4(7): 345-347. Aug.-Sept. 1942. 99.8 F79



Presented before the regional congress of the Forestry Association of Quebec, held on July 15-16.

Stresses the economic importance of forest land in the Province of Quebec as a source of employment and of revenue.

COOKE, GILES B. Toward self-sufficiency in cork. Chem. & Engin. News 20(15): 956-957. Aug. 10, 1942. 381 J825N

Cork stripped from California trees has proved the equal of Mediterranean cork. More than 21,000 cork seedlings were set out in California and Arizona, and many acorns were planted in forest ranges to produce trees for 1942. A survey has shown that trees are growing in southeastern states and 800 young trees have been planted there.

A CORK growing industry for the South. Mfrs. Rec. 111(8): 26-27. Aug. 1942. 297.8 M31

Approximately 751,727 square miles in the United States are suitable for the growing of cork. Of this area, 82,004 are in the California region and nearly all the remainder is in the South where a grade of cork typically Portuguese can be produced. Several thousand cork oak seedlings are being planted there this year.

DILLER, OLIVER D., and others. Ohio forest survey. Farmwoods unit; a manual of procedure. Ohio Agr. Expt. Sta. Div. Forestry. Forestry Pub. 71, 68 pp. Wooster, 1940. 99.9 Oh33

Survey organized in 1938 on the basis of county units to obtain detailed, factual information relative to the forest situation in the state.

The present manual presents a description of the techniques used in the collection and compilation of data during approximately two years of project operation. Basic procedures as described in the original manual remain unchanged.

FOREST regions of Canada. Forest and Outdoors 38(8): 239-242. Aug. 1942. 99.8 C16

Lists the main characteristics of the different forest regions of Canada.

INERSON, F. A. Southern forest resources and the war. Jour. Forestry 40(7): 519-522. July 1942. 99.8 F768

Delivered before a meeting of the Forestry Section, Association of Southern Agricultural Workers, Memphis, Tenn., Feb. 4, 1942.

JUNTA nacional da cortiça, Portugal. Boletim, 2-38. 3 v. Lisbon, 1938-1941. 309.9 J96

Bulletins of the National Cork Board of Portugal containing information on the production, manufacture, marketing, and uses of cork, including discussions of historical and present-day interest concerning cork forests of Portugal.

MIRANDA BASTOS, ARTHUR de. El comercio de maderas del Brasil. Maderil 14(166): 11-16. Apr. 1942. 99.83 M26

Traces the history of the Brazilian wood trade from its earliest times, bringing out the following aspects: the so-called "Pine Period", types of wood other than pine figuring in foreign trade, the Amazon region as a producer of lumber, exports of wood in forms other than cut lumber, and the act suspending temporarily the transportation of rough wood on certain railways. Also gives figures for quantity and value of exports in wood, 1915-1940.



NEWLAND, HARROD B. Kentucky forestry news. Ky. Sportsman 5(1): 15. Aug. 1942. 410 K41

A state-wide survey of forest conditions in Kentucky was made during June under the auspices of the U. S. D. A. War board for Kentucky. The findings emphasize the fact that the forests are being cut at least six times in excess of the natural increment, that present supplies are not sufficient to supply additional wood-using industries, and that prompt, remedial action is necessary by timber owners, users and public agencies.

ORELLANA B., RODRIGUE. La balsa; arbol de la floresta ecuatoriana. Banco Hipotecario del Ecuador. Bol (Epoca 2) 5(9): 37-59. Dec. 1941. 281.8 B222

Report made under the supervision of the Sucursal Mayor, Banco Hipotecario del Ecuador, on the balsa tree of Ecuador. Chapters include: historical notes, regions of production, economic importance, characteristics, and uses, botanical features, growing conditions, drying of the wood, commercial classification, exports, cost of reforestation, and national protection of the balsa (including the text of the decree of December 26, 1936, issued to encourage balsa production).

SOUTH Africa's timber resources; improved results from state plantations. African World 160(2072): 66-67. July 25, 1942. 286.8 Af8

Increased output from state softwood plantations and to a lesser degree from private plantations has placed the South African lumber industry on a more stable basis and brought problems in price fixing.

WYSONG, NOEL B. Forest preserve district of Cook county. Arborist's News 7(8): 59-63. Aug. 1942. 99.8 Ar14

Present holdings of forest preserves include thirty-five thousand acres with about sixty per cent of area timbered. Through planting and encouragement of natural forest regeneration, it is planned to increase timbered portion to seventy-five per cent of whole.

### LUMBERING

CHANT, D. B. Forty years of safety work. Pulp and Paper Mag. Canada 43(8): 620-621. July 1942. 302.8 P96

KEPPNER, TED. Selling safety to the logger. West Coast Lumberman 69(8): 50, 71. Aug. 1942. 99.81 W52

The safety supervisor of the Crown Zellerbach Corp., Cathlamet, Washington, gives a detailed outline of a carefully worked-out safety program.

KLEM, GUSTAV G. Syrefelling av lovtraer. Tidsskr. for Skogbruk 49 (11): 352-354. Nov. 1941. 99.8 T432

Discusses the practice of allowing broadleaf trees to lie and season as felled with tops intact.

McNALLY, J. A. Logging tools are greatly improved. Pulp and Paper Mag. Canada 43(8): 627, 631. July 1942. 302.8 P96

MOTTET, ARTHUR L. How to reduce seasoning degrade. West Coast Lumberman 69(8): 36-37. Aug. 1942. 99.81 W52

Describes a simple and effective method of protecting green stock until it is ready to be placed in the kiln in which sprays of suitable type keep the stock dampened with water.



PARSONS, H. H. The application of tractor and allied equipment in the logging field. Forestry Chron. 18(2): 82-85. June 1942. 99.8 F7623

Paper given before the Southern Ontario Section, Canadian Society of Forest Engineers at the military institute, Mar. 20, 1942.

Attempts to include the most varied and important phases in which tractor application is proving economical in so far as logging and pulp operations are concerned, in northern Ontario.

RISE, CARL E. A safety program in the lumber industry. Ames Forester 30: 55-61. 1942. 99.9 Io94

STERN, R. W. Pulpwood barking methods, 1900-1942. Pulp and Paper Mag. Canada 43(8): 576-578, 621-622. July 1942. Bibliography, pp. 621-622. 302.8 P96

TAYLOR, W. H. Women's industrial army moving into more active role in sawmill operations. Miss. Val. Lumberman 73(31): 10-11. July 31, 1942. 99.81 M69

Approximately 300 women largely between ages of 20 and 35 are now employed in Longview, Washington, plants.

U. S. CHILDREN'S BUREAU. Occupational hazards to young workers; report no. 4, The logging and sawmilling industries. U. S. Children's Bur. Pub. 276, 81 pp. Washington, D. C., 1942. 158.2 P96

The logging and sawmilling industries were made the subject of investigation because of the hazardous nature of the work. A report on the findings of the investigation was originally published in mimeographed form on May 2, 1941.

The report describes the hazards of logging and sawmilling employment; gives expert opinion on the advisability of employing children under 18 years of age in such pursuits; and cites minimum-age standards voluntarily maintained by employers or required by state laws for such employment.

Appendix C. Hazardous-Occupations Order No. 4, issued on June 24, 1941, and made effective Aug. 1, 1941.

WACKERMAN, A. E. Logging and the future. South. Lumberman 165(2073): 49-50. Aug. 15, 1942. 99.81 So82

Discusses the necessity for logging operations which will protect forest productivity and at the same time make a close utilization of timber crops.

### LOG TRANSPORTATION

KANE, M. R. Great advance in wood transport. Pulp and Paper Mag. Canada 43(8): 633, 635. July 1942. 302.8 P96

Tractor, truck and sled improvements, better snow roads, railway extensions, and more healthful living conditions for lumberjacks have contributed to the advance in log hauling in the past forty years.

LEEMING, JOSEPH. Modern ship stowage including methods of handling cargo at ocean terminals. U. S. Bur. Foreign and Dom. Com. Indus. Ser. 1, 719 pp. Washington, D. C., 1941. 157.54 In24

Lumber, pp. 278-288 (Stowage of Special Cargoes), describes basic principles of storing sea-borne cargoes of lumber with tables giving cargo stowage factors for logs with bark, cargo stowage and weight factors per thousand board feet, and weights of various woods.



WATER transportation for forty years. Pulp and Paper Mag. Canada 43 (8): 635-637. July 1942. 302.8 P96

Old methods of moving pulpwood by water to mills are still found ranged along with the new. Changes are in the mechanics, particularly in the adaptation of equipment and methods to specific conditions, as demonstrated by the Alligator in eastern Canada and the Davis rafts used to cross the turbulent waters around the Queen Charlotte Islands.

WESTON, J. ROLAND. Sunken logs and logging brands of the lower Pearl river valley. South. Lumberman 165(2073): 56-57. Aug. 15, 1942. 99.81 So82

Notes of historical interest on logging in the South sixty or more years ago, including method of operation, log brands, rafts used in transportation of logs, and the recovering of sunken logs.

### LUMBER DRYING

TERGESON, O. W. Uniformity of air distribution in a lumber dry kiln. Wood Prod. 47(7): 15-16, 18. July 1942. 99.82 W856

In order to determine the degree to which uniformity of air flow through a pile of 1-inch boards is influenced by varying factors, the following points were studied by the Forest Products Laboratory, Madison, Wisconsin: (1) Width of entering air space, (2) projecting edges on the entering air side, and (3) thickness of stickers.

WAKEFIELD, C. H. Kiln drying to meet government specifications. West Coast Lumberman 69(8): 54. Aug. 1942. 99.81 W52

Describes kiln drying at the C. D. Johnson Lumber Corp., Toledo, Oregon.

WILLIAMS, CHARLES J. Dry lumber - answer to speed in war production. Gulf Coast Lumberman 30(9): 20, 38. Aug. 1, 1942. 99.81 G95

Tells of urgent need by the lumber industry for a relatively small quantity of steel to be used in drying equipment so that a steady stream of seasoned lumber and plywood can be produced.

### PRODUCTS UTILIZATION

BENSON, A. O., and BELL, C. C. Guide to use of wood as an alternate material in agricultural implements. U. S. Forest Serv. Forest Prod. Lab. R1298, 14 pp., processed. Madison, June 1942. 1.9 F761R

Tables show: Grouping of farm implement items on basis of similar use requirements; Substitution in specific implement parts and by kinds of wood; Broad classification of woods according to characteristics and properties.

BUTT, BASEDEN. Timber architecture. Wood 5(7): 174-176. July 1940. 99.822 W855

"Many of the timber houses of New England were built in the eighteenth century, but are still in full and efficient use."

The typical one is clapboarded, in oak or white pine on a timber frame, with the architecture bearing a close resemblance to that of the typical English house of Queen Anne times.

CARLSON, T. A. Box makers play vital war role. Timberman 43(9): 13-16. July 1942. 99.81 T484

The Forest Products Laboratory has undertaken an extensive program in redesigning and improving containers and crates for all sizes



of army material and lend-lease shipments in an attempt to standardize specifications for them.

Map, p. 15, gives geographical distribution of American box timbers.

COMPTON, WILSON. Where do we go from here? Next 12 months likely to be hardest ones for retailers. (A thumbnail survey of factors affecting the forest industry.) South. Lumber Jour. 46(5): 38. July 1942. 99.81 So8

EMMETT, J. A. More uses for plywood. Veneers and Plywood 36(8): 8-9. Aug. 1942. 99.83 V55

Plywood is suitable for innumerable odd building and repair jobs, such as meat-aging cabinets, cabs for riding tractors, feed and water troughs, chutes for carrying hay and grain, bins for weighing bulk produce, and shields to be placed around fruit trees during spraying.

FIDDES, JAMES. Wooden containers; how to economise in timber - the use of stapled ply-boards. Timber Trades Jour. 161(3434): 353-354. June 20, 1942. 99.81 T48

HILL, ROBERT C. Wooden ships. Timberman 43(10): 26-28. Aug. 1942. 99.81 T484

Shortage of steel, economy and speed in construction, and advantages for war use because less likely to be sunk or to be victims of torpedoes than steel ships, are reasons for the recent agitation for construction of wooden freighters.

A short review of the building of wooden ships during the first World War period, 1917-1921, is included.

HOGUE, C. J. Characteristics and uses of wood. Miss. Val. Lumberman 73(26): 10-13, 23. June 26, 1942. 99.81 M69

Describes the growth process that goes on within a tree and discusses the many new uses to which timber is being adapted daily.

KELLOGG, ROYAL S. Newsprint paper in 1941. World's Paper Trade Rev. 117(23): 1070-1073. June 5, 1942. 302.8 W89

Output of newsprint paper in North America in 1940 and 1941 reached an all-time high for a 24-month period.

LAMINATED wood construction. Wood 6(11): 284-287. Nov. 1941. 99.82 W855

Great advances have been made in plywood and laminated wood construction, both in the manufacture and the types of adhesives used, and in the methods of building up the plies to form curved surfaces. The British process of building up boats on the laminated principle, as described in this article, embodies several improvements over the American method.

SCOTT, M. E. The properties and uses of South African kiazat (*Pterocarpus angolensis*) timber. So. African Forestry Assoc. Jour. no. 7, pp. 61-66, Oct. 1941. 99.9 So82

Attractive appearance and valuable properties make kiazat the most popular indigenous timber of the Transvaal. Its distribution, yield, value, seasoning qualities, properties, structure and uses are discussed.

SHAW, CHARLES L. Timber goes to war. Canad. Business 15(8): 20-27, 96. Aug. 1942. 287 C162

The British Columbia timber industry is supplying lumber to Great Britain, Canada and the United States in record-breaking outputs in



spite of shipping shortage and labor problems. Timber assignments are for the reconstruction of bombed cities, the building of giant hangars and air bases, and other wartime needs. With the virgin timber supply being depleted, lumber research men are planning for a "Lumber's aftermath" when greater emphasis will be placed on pulp and plastics, plywood, and fabricated lumber.

SOMERVELL, BREHON B. Construction goes to war. Constructor 24(7): 64-65, 107. July 1942. 290.8 C764

Approximately 10 billion board feet of lumber will have been bought by the Materials and Equipment Section of the Corps of Engineers by the end of 1942. Contrasted with the 2,880,000,000 board feet of building lumber bought during the 18 months from June 15, 1917, to December 15, 1918, in the first World War, this indicates how our nation is being turned into an armed camp with hundreds of thousands of buildings, mostly of wood, going up.

STRAIGHT-LINE production of wood skis for United Nations warriors.

Wood Prod. 47(7): 14, 20. July 1942. 99.82 W856

The success of the Allied Aviation Corporation of Baltimore, Md., in producing wood skis on a straight line production basis is revolutionizing the entire industry. "Aerofleet" skis are made by the Vidal process, one of several pressure tank processes devised for the bonding of wood veneers with a synthetic resin.

TELFORD, C. J. Equipment and methods for harvesting farm woodland products. U. S. Dept. Agr. Farmers' Bul. 1907, 25 pp. Washington, D. C., 1942. 1 Ag84F

Equipment and methods for harvesting logs, poles, posts, ties, fuel wood, and shakes for sharpening saws and air-drying lumber, and for controlling blue stain and checking in logs, are presented.

TURNER, ROBERT. Wood pipe can also serve. South. Lumberman 165(2073): 34. Aug. 15, 1942. 99.81 So82

Proven installations of wood pipe show that it can be used advantageously for drainage, water supply, or sewage. It costs less than one-half as much to install as cast iron pipe and under normal conditions it will give excellent service for 30 to 50 years without appreciable maintenance cost.

WALTON, JAMES. The timberwork of English barn buildings. Country Life [London] 21(2370): June 19, 1942. 80 C83

English barns built six or seven centuries ago still display strength and utility for purpose in their massive timbers.

The development of the timber framework as used in domestic and church tithe barns is described and illustrated, along with some theories as to the use of the timbers before being placed in barns.

WOOD in aircraft production. Canada Lumberman 62(15): 13-15. Aug. 1, 1942. 99.81 C16

Describes care taken in the selection of Sitka spruce for operations in deHavilland Aircraft Plant.

YOUNG, E. D. Pine boxes and crates. Timberman 43(9): 17-19, 46. July 1942. 99.81 T484

Sawn pine shook offers one of the most satisfactory methods of packing all types of fruits and vegetables.



WOOD AS FUEL

HALL, ROBERT T., and DICKERMAN, M. B. Wood fuel in wartime. U. S. Dept. Agr. Farmers' Bul. 1912, 22 pp. Washington, D. C., 1942. 1 Ag84F

The best sources of wood fuel, its heating value, and some recently developed techniques in the production, transportation, and utilization of fuel wood, are pointed out.

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. Wood fuel and wood stoves. U. S. Forest Serv. Forest Prod. Lab. R1279, 6 pp., processed. 1.9 F761R

Topics: Heat value of wood, burning of wood, avoidance of creosote, wood briquettes, burning wood with coal, test of slow-combustion stove, American wood-burning stove, and research in wood fuel.

VENESS, J. C. What price fuelwood? Forestry Chron. 18(2): 86-88. June 1942. 99.8 F7623

WOOD PRESERVATION

HUSKINSON, J. S. Paint sales help to promote conservation through preservation. Miss. Val. Lumberman 73(29): 10-12. July 17, 1942. 99.81 M69

MANY creosoted posts used in fencing government property. Wood Preserv. News 20(7): 79-81. July 1942. 300.8 W853

RAILROADS' response to war demands reflected in increased ton-miles. Wood Preserv. News 20(7): 82-83, 89-90. July 1942. 300.8 W853

Statistics compiled from 1941 annual reports made by Class I railroads to the Interstate Commerce Commission on railroad cross-tie renewals, mileage, tonnage, etc., show an increase in the total number of treated ties used in replacements and a falling off in the number of untreated ties used.

SALVAGED timbers are treated for new highway bridge. Wood Preserv. News 20(7): 88-89. July 1942. 300.8 W853

The Pawnee Rock Bridge across the Arkansas river near Pawnee Rock, Kansas, was recently completed with its caps, stringers, and posts made of salvaged material from old railroad trestles. Shortly after its completion, the Arkansas River reached one of the highest flood stages recorded at this point during the past twenty years. The bridge withstood this flood without damage.

WOOD TECHNOLOGY

ABRAMS, ALLEN. Lucrative lignin. Pulp and Paper Mag. Canada 43(9): 686-688. Aug. 1942. 302.8 P96

Lignin, by-product of sulphate pulp, contains sugars, resins, and reaction products. Research work is now being carried on for the segregation of the lignin products, and for the economic use of the sugars obtained.

A precipitation treatment of spruce lignin now accounts for more than one-half of the vanillin produced in the United States. Spent liquor from the vanillin process yields fiber useful in making plastics either in sheet form for lamination or as powder for molding at costs lower than those for materials of comparable properties. Other commercial applications are being found in the tanning of leather, compounding of rubber and deflocculating of materials in liquors.



BENSON, H. K. Potential wood chemical industries of the Pacific coast. Timberman 43(10): 10-11, 28. Aug. 1942. 99.81 T484

The utilization of carbohydrates in wood, the manufacture of expensive high grade carbons, the extraction of tanning materials, and the ultimate use of lignin for plastics and other derivatives are the potential industries emphasized.

CHIDESTER, G. H., and McGOVERN, J. N. Sulfite pulp from lowland white fir. U. S. Forest Serv. Forest Prod. Lab. R1404, 8 pp., processed. Madison, June 1942. 1.9 F761R

Presents a report of digestions made at the Forest Products Laboratory to determine the yield and properties of lowland white fir pulps having different degrees of pulping.

COHEN, W. E., and MACKNEY, A. W. Effect of preparation on wood analysis; the preparation of a wood sample for chemical analysis. Pulp and Paper Mag. Canada 43(9): 698-701. Aug. 1942. 302.8 P96

Discusses experiments made on Australian eucalypt wood and mountain ash using mesh sieves of varying sizes to determine whether representative samples of each wood could be obtained from the sortings.

IN the manor house. Wood 6(11): 288. Nov. 1941. 99.82 W855

Describes a king-post roof of English oak built in the 10th century during the reign of Edward the Confessor which is staunch and sound today.

KELLER, E. L., and SIMMONDS, F. A. Some observations on the problem of iron in bleaching wood pulp. U. S. Forest Serv. Forest Prod. Lab. R1405, 11 pp., processed. Madison, June 1942. 1.9 F761R

Deals with the absorption of iron from aqueous solution and the effect of the iron in the process water used in bleaching on the color of the bleached pulp.

MACLEAN, J. D. The rate of temperature change in wood panels heated between hot plates. U. S. Forest Serv. Forest Prod. Lab. R1299, 19 pp., processed. Madison, Aug. 1942. 1.9 F761R

Discusses the rate of temperature change in wood between the heated plates of a hot press, as in the hot-press gluing of plywood. Information gathered is of value in determining the time required to obtain a desired temperature or the temperature obtained under various combinations of wood and heating conditions in a specified time.

TURNBULL, JOHN M. The relationship between modulus of rupture and weight in South African grown pine timber. So. African Forestry Assoc. Jour. 7, pp. 67-77. Oct. 1941. References, p. 77. 99.9 So82

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. List of publications on mechanical properties and structural uses of wood and wood products. U. S. Forest Serv. Forest Prod. Lab. R200, 30 pp., processed. Madison, July 1942. 1.9 F761R

#### RANGE MANAGEMENT

CHAPLINE, W. R., and COOPERRIDER, C. K. Climate and grazing. Cattleman 29(2): 19-29. July 1942. Literature cited, p. 29. 49 C29

Discusses the range in relation to climate and the importance of range management in the solution of climatic problems.



SANDVIG, E. D. Montana's forest grazing and its livestock. Mont. Farmer 29(23): 11. Aug. 1, 1942. 6 M764

States that the national forests represent our pioneering effort to apply conservation and planned land management on a large scale in the United States.

SAUNDERSON, MONT H. Range, stock management on the Little Big Horn. Amer. Cattle. Prod. 24(3): 7-9. Aug. 1942. 49 P94

The management practices discussed are those of a small group of cattle ranches with an unusually favorable location. They have summer range permits on the Big Horn National Forest and leases on the Crow Indian Reservation for summer and for spring-fall grazing.

### WILDLIFE

HAAS, PHILLIPS, and HILL, RALPH R. The influence of forestry practices on game management. S. Dak. Conserv. Digest, June 1942, pp. 2, 10. 412.9 So822

Paper presented at the meeting of the Black Hills sub-section, Society of American Foresters, Rapid City, S. Dak., April 18, 1942, showing the seriousness of not considering wildlife conservation in planning forestry activities.

JENKINS, B. C. Old fires affect this season's game. Mich. Conserv. 11(7): 4-5. July-Aug. 1942. 279.9 M582

Succession of vegetation and wildlife is diversified by fires, particularly first fire following logging.

SOCIETY OF AMERICAN FORESTERS. COMMITTEE ON GAME MANAGEMENT WITH REFERENCE TO FORESTRY. The effects of forest harvest on game production. Jour. Forestry 40(8): 639-641. Aug. 1942. 99.8 F768

The Committee reports that the two most urgent questions on the potentiality of a forest for wildlife production are: (1) kind and quantity of plants needed for a given game species in a region, and (2) effects of different cutting methods and their variation on wildlife.

"TANEKAHA." Tinkering with wild life; the policeman and the biologist. Forest and Bird no. 64: 9-10. May 1942. 413.9 N42

Man interferes with wildlife in two ways: (1) Acting as a sort of policeman, slaying one wild creature because it attacks another; (2) Interfering with its habitat. He deforests the land by fire and by axe, introduces aggressive vegetarians (deer, goats, etc.), and directly or indirectly causes the land to erode.



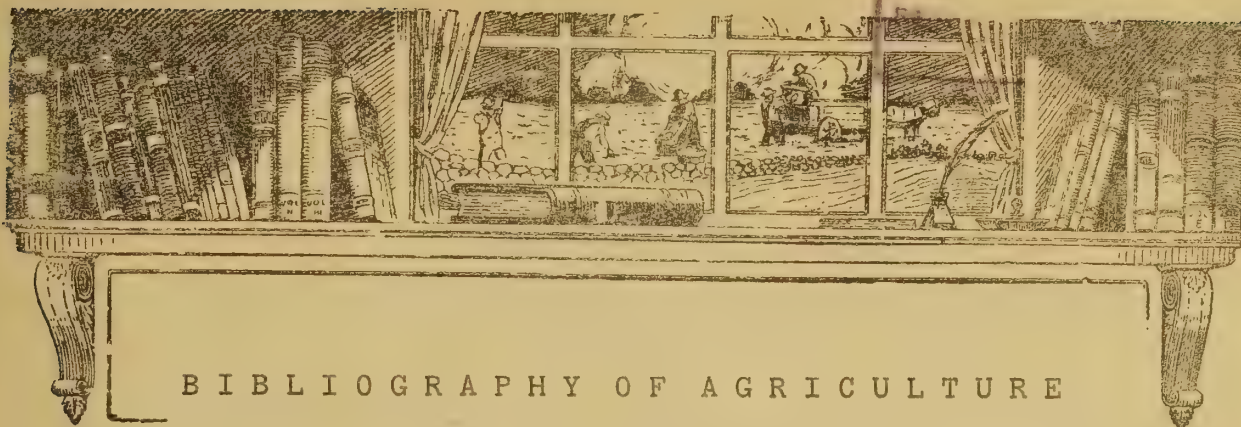
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FORESTRY

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Vol. 1

September 1942

No. 3

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## BIBLIOGRAPHY OF AGRICULTURE

SECTION E  
FORESTRY

Vol. 1

September 1942

No. 3

GENERAL FORESTRY

CAMERON, D. ROY. Dominion forest service war work. Canada Lumberman 62(18): 17-18, 39. Sept. 15, 1942. 99.81 C16

War work is largely concerned with research and cooperation with other agencies of the government.

CANADIAN PULP AND PAPER ASSOCIATION. WOODLANDS SECTION. Proceedings, 24th annual meeting, January 28, 29 and 30, 1942. 55 pp. Montreal, 1942. 99.9 C166

Discussions on pulpwood skidding technique, truck road construction and maintenance, hygiene and accident prevention, forest conservation and many other phases of forestry.

CLEMENT, RAY. A day in a tree nursery. Conserv. Volunteer 4(24): 22-26, illus. Sept. 1942. 279.8 C765

Describes the production and distribution of native conifers by one of the tree nurseries operated by the Division of Forestry of the Minnesota Department of Conservation.

CLEMSON AGRICULTURAL COLLEGE OF SOUTH CAROLINA. Farming for victory; annual report, 1941. Clemson Agr. Col., S. C. Ann. Rpt. 1941, 156 pp. Clemson, 1942. 275.29 So8A

Forestry, pp. 84-87.

CONDITIONS in Sweden. Timber Trades Jour. 162(3440): 184. Aug. 1, 1942. 99.81 T48

Regulations covering wood exports, increase in domestic use of wood as fuel, and forest improvements practiced between 1928 and 1940.

CONKLIN, HOWARD E., WEEKS, DAVID, and WERTHEIMER, RALPH B. The possibilities of rural zoning in the Sierra Nevada foothills; a study in the livestock-forest area of Yuba county, California. 59 pp., processed. Berkeley, U. S. Bur. of agricultural economics, June 1942. 1.941 L2P84

Issued in cooperation with California Agricultural Experiment Station.

Possible contribution of zoning toward stabilization of forest boundaries and toward development of systematic grazing practices.

GLOWA, THEODORE A. Forestry at the U. S. M. R. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakena. Alumni News, 1940, pp. 51-52, 62. Wanakena, 1940. 99.9 N487

Forestry at the U. S. Military Academy, West Point, N. Y.

HEACOX, E. F. The place of forestry in the Longview operation of the Weyerhaeuser timber company. West Coast Lumberman 69(9): 48, 50. Sept. 1942. 99.81 W52

The forestry program at the Longview Branch of the Weyerhaeuser Timber Company is planned on an economically sound, dollars and cents basis.

JACOBSON, ERIC G. Some Rhode Island forest history. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakena. Alumni News, 1940, pp. 43-46. Wanakena, 1940. 99.9 N487



## MISSISSIPPI STATE COLLEGE. EXTENSION SERVICE. Annual report, 1941.

Miss. Agr. Col. Ext. Bul. 126, 133 pp. State College, May 1942.

Forestry, pp. 36-39. Statistics on forestry activities such as number of areas reforested, number of windbreaks or shelterbelts planted, number of farmers practicing selection cutting, report of a forestry training tour, work of the forest products cooperative, conservation work carried on, etc.

PENHA, GONCALVES. Economia corticera; da importancia da cortica para a economia nacional. Junta Nac. da Cortica. Bol. 4(39): 26-30. Jan. 1942. 309.9 J96

Summary in English, page v. In discussing the part played by cork in the economics of Portugal, the author gives the reasons for its lightness, elasticity, compressibility, non putrescibility, and mentions other dominant qualities.

This article is a continuation of previous ones beginning with no. 27 of volume 3, January 1941.

QUESTIONS and answers regarding M-208; Questions by Southern pine war committee. Answers by the War production board. South. Lumber Jour. 46(9): 14, 16, 52. Sept. 10, 1942. 99.81 S68

TEXAS AGRICULTURAL AND MECHANICAL COLLEGE. EXTENSION SERVICE. Annual report, 1941. Tex. Agr. Col. Ext. Ann. Rpt. 1941, 20 pp. [Austin, 1942]

What was produced for home use - Lumber, p. 9. Achievements in forestry: decrease in number of woodlands burned, increase in number of sawmills in active operation, in utilization of farm timber for farm purposes, etc.

THOMPSON, HERBERT A. Experiences in salvaging hurricane timber. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakena. Alumni News, 1940, pp. 24-26. Wanakena, 1940. 99.9 N487  
1938 hurricane in New England.

UGANDA. FORESTRY DEPT. Annual report, 1941. 8 pp. Uganda, 1942. 99.9 Ugl

WILEY, JOSEPH J. An industrial forestry program. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakena. Alumni News, 1940, pp. 47-50, 60. Wanakena, 1940. 99.9 N487  
The forestry program of the Lumber River Pine Corporation, Lumberton, North Carolina.

### FOREST ADMINISTRATION AND POLICY

BROOKS, R. L. The forest policy of Trinidad and Tobago. Caribbean Forester 3(4): 151-157, processed. July 1942. 1.9622 T2C23

CANCELL, BENTON R. Forest policy and public regulation. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakena. Alumni News, 1940, pp. 5-6, 23, 26. Wanakena, 1940. 99.9 N487

Any successful forest policy must take into account both public interest and economic viewpoints. A thorough analysis of our forestry problem is essential.

GARDINER, R. STRACHAN. Taxation of woodlands in England and Wales. Quart. Jour. Forestry 35(2): 50-58. Apr. 1941. 99.8 Q2

Summarizes the subject under the following headings: Local rates and land drainage rates, income tax, land tax, excess profits tax, and death duties.



GONET, Ch. La classification vaudoise des bois de service résineux.

Jour. Forest. Suisse 93(7): 141-146. July 1942. 99.8 J82

What the classification system for resinous woods used by the natives of Vaud or French-speaking canton in Switzerland is, and the reason for its use.

HOW FARES Poland? Timber Trades Jour. 162(3440): 189. Aug. 1, 1942.

99.81 T48

"Forest exploitation under predatory Nazis."

INDIA'S forests and the British Raj. Forest & Outdoors, Sept. 1942, p. 270.

99.8 C16

LE SUEUR, A. D. C. Estate woodlands I-II. Country Life [London]

92(2376, 2377): 224-225, 282-283. July 31, Aug. 7, 1942. 80 C83

The main problems of estate woodlands in England deal with the lack of private finance for replanting, based on the long wait necessary for return of profit, and the lack of good silvicultural practices. Cooperation between state supervisors and owners of estates is suggested as a solution of the problem, with freedom in supervision allowed to owners who manage their woodlands satisfactorily.

LOCKARD, C. R. Cooperative forestry. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakena. Alumni News, 1940, pp. 27-29. Wanakena, 1940. 99.9 M487

The growing recognition of the importance of small forest holdings has placed emphasis on the formation of forestry cooperatives, but definite objectives and problems must be worked out before they can become active.

MARCKWORTH, GORDON D., and others. New plan outlined for State forest board. West Coast Lumberman 69(9): 30-31, 53. Sept. 1942. 99.81 W52

Program for coordinating forest activities of the State of Washington submitted by a special committee composed of Gordon D. Marckworth, Horace J. Andrews, Martin N. Deggeller, E. R. Edgerton, Frank Henry, Hill Jones, Clyde Martin, Herman Nelsen, Walter Rathert, Peter Terzick, H. I. Tucker, and Harry Wall.

MAYBERRY, ROBERT. The state's forest rangers. Conserv. Volunteer 4(24): 39-42. Sept. 1942. 279.8 C765

Forest fire prevention and control is one of the most important duties of Minnesota's forest ranger. However, he has many other duties requiring skill and knowledge in practically every aspect of forestry as well as a knowledge of human psychology and sociology.

RATHBUN, LAWRENCE W. Help amend the constitution to change the timber tax. Soc. for Protect. of N. H. Forests. Forest Notes 6(3): 7-12. Sept. 1942. 99.8 F7691

Advocates the addition of an amendment to the timber tax which will maintain a mathematical relationship between tax and timber growth.

S., J. E. The future of forestry in Britain. Quart. Jour. Forestry 36(2): 83-87. July 1942. 99.8 Q2

Outlines a plan of forest management which provides for a Forest Authority with enlarged powers to work with other bodies such as a Ministry of Planning, but is not a system of "all-out" nationalization. It calls for a vast educational drive and the establishment of a corps similar to the Civilian Conservation Corps of the United States in order to make the program successful.



STEIJN, A. van. Quelques données sur les conditions forestières des Pays-Bas. Jour. Forest. Suisse 93(7): 150-151. July 1942. 99.8 J82  
Discusses forest administration in Pays-Bas, Switzerland, listing the three forestry laws in force, and presenting statistics on forest resources.

ZUKOWSKI, A., and COTON, D. State control of private forests in Poland. Forestry Abs. 4(1): 1-8. 1942. References, pp. 8-9. 241.01 Im7

The substance of the Polish Act for State Control of Private Forests (1932) is given with a brief introduction stating Poland's position among the timber producing countries of the world prior to the present conflict, the importance of Poland's timber trade in her general economy and the conditions which led to the state control of private forests.

The Act insured rational management of private forests by preserving the national forest types of Poland and by limiting the annual thinnings to the current annual increment.

#### FOREST FIRE PROTECTION

BROWN, MORA M. Lost sanctuary. Amer. Forests 48(9): 408-409, 432. Sept. 1942. 99.8 F762

Describes a woodland sanctuary which was destroyed by a forest fire. FOREST fire control comes to Jackson county; intensive protection program reduces loss to 2.57 per cent of wooded area. Ala. Conserv. 14(11): 8. Aug. 1942. 279.8 All

The Division of Forestry received assistance from the Forest Relations Department of the Tennessee Valley Authority in carrying on a forest fire prevention program throughout the county. FOREST fire protection receives attention from defense agencies. Volunteer Firemen 9(9): 12. Sept. 1942.

FRONTZ, LEROY. Fire: farm and forest enemy. Prog. Farmer. Miss. Val. Ed. 57(8): 7. Aug. 1942. 6 So81

Briefly lists the effects of fire on woodlands as destroying soil fertility-building ability of woods cover, slowing down rate of tree growth, damaging soil, and reducing effectiveness of woods for soil and water conservation with some figures to show the actual monetary value of the losses.

GREST, EDWARD G. Forest fire control in a Georgia county. U. S. Soil Conserv. Serv. Soil Conserv. 8(3): 59. Sept. 1942. 1.6 So3S

Tells of a volunteer fire control program organized in Greene County, Georgia.

HENSON, HILLIARD. Why incendiary fires in the southern Appalachians? Amer. Forests 48(9): 419, 430. Sept. 1942. 99.8 F762

Reasons peculiar to the mountaineer locality, not sabotage, seem to be the cause of deliberate burning in the Southern Appalachians.

HERRIN, R. V. Fire prevention suggestions for lumber and woodworking operations. South. Lumber Jour. 46(9): 63. Sept. 10, 1942. 99.81 So8

MARSH, GEORGE. Jefferson county forestry program forges ahead. Ala. Conserv. 14(12, i.e.3): 13. Sept. 1942. 279.8 All

Working toward an ultimate goal of having a detection system completely covering all forest lands, Jefferson County has already completed six forest fire observation towers and has selected a site for the seventh.



FOREST MANAGEMENT

ACKERS, C. P. Private estates and forestry. Estate Mag. 41(4): 169-173. Apr. 1941. 10 Es8

Presents the main reasons for the bad condition of British woodlands and advances suggestions for their improvement.

ADAMS, W. R., and CHAPMAN, G. L. Competition in some coniferous plantations. Vt. Agr. Expt. Sta. Bul. 489, 26 pp. Burlington, June 1942. Literature cited, pp. 25-26. 100 V59

Plantations of five species of pine: jack pine, Norway pine, pitch pine, Scotch pine and northern white pine, were established, at even foot spacings varying from two- to eight-feet each way on light sandy soil typical of the Northern Champlain Valley in the spring of 1912. The effects of 28 years of competition on the five species are analyzed in the present study.

EVANS, C. F. A saga of southern pine. Amer. Forests 48(9): 403-406, 428. Sept. 1942. 99.8 F762

The rapidly expanding pulp and paper industry of the South is making real and measurable progress in conserving forest resources and assuring a continuous growth of pulpwood by following selective or partial cutting and other practices of good forest management.

EVERY farmer can grow his own greenbacks. Forest & Outdoors, Sept. 1942, pp. 271-272. 99.8 C16

Presents arguments and directions for the establishment of woodlot and shelterbelt combinations on poorer farm lands as given in an address before the Prairie Farm Rehabilitation Association at Regina by the Superintendent of the Dominion Forest Nursery at Sutherland, Sask.

HARTMAN, WILLIAM A. The place of forest land in post-war agriculture of the South. South. Pulp and Paper Jour. 5(3): 8-10. Aug. 1942. 302.8 So8

Digest of remarks in panel discussion on forest conservation at annual meeting of the Southern Association for the Advancement of Science, Atlanta, Georgia, April 2, 1942. Two points are emphasized: (1) Forest lands, which represent about 57 per cent of the total land acreage of the South are ineffectively used at the present time; (2) Profitable employment and industrialization can result from wise development and management of the forest resources.

HORN, STANLEY F. Trees as a crop. South. Agr. 72(6): 6-7. June 1942. 6 So83

A forestry survey recently completed by the U. S. Forest Service revealed the fact that 60 per cent of the land area of the South is forested. The Forest Service has mapped out a program for keeping woodlands permanently profitable.

LEACH, M. C. What sound forest management means to an Alabama lumber company. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakena. Alumni News, 1940, pp. 34-36. Wanakena, 1940. 99.9 N487

Delivered at the Annual Meeting of the Southern Agriculture Workers, Birmingham, Ala., Feb. 9, 1940. Cites examples of forest management practices followed by the Alger-Sullivan Lumber Company, Century, Fla.

PENISTAN, M. J. The Caledonian pine forest. Quart. Jour. Forestry 36(2): 59-69. July 1942. 99.8 Q2

The census of woodlands taken on the eastern and northern highlands



of Scotland during the summers of 1938 and 1939 shows that Scots pine and birch tend to be on the decline due to peat production. Both from a scientific and aesthetic viewpoint, it is important that the remains of these forests be preserved and improved.

SISAM, J. W. B. Canadian farm woodlots. Quart. Jour. Forestry 35(2): 59-61. Apr. 1941. 99.8 Q2

Problems in management and utilization of farm woodlots confronting Canadian foresters.

TRENK, F. B. Timber outlook in the white pine belt. Wis. Conserv. Bul. 7(8): 17-19. Aug. 1942. 279.8 W752

Gives the results of a survey made during the winter of 1940/41 by the Conservation Department of the U. S. Forest Service to determine how the tree crop was being cut in reference to growth, and whether its products were reaching the most profitable markets.

TRYON, H. A., and FINN, R. F. Improvement cuttings in mixed hardwoods. Black Rock Forest Papers 1(20): 120-126. Cornwall-on-the-Hudson, N. Y., 1942. 99.9 B562B

The location, description, history, treatments and present condition of a silvicultural project on an uneven-aged stand of mixed hardwoods and hemlocks in the Black Rock Forest of New York are discussed and summarized.

WOODLANDS in South Devon. Quart. Jour. Forestry 36(2): 37-39. July 1942. 99.8 Q2

Uneven-aged, old woods, showing a lack of silvicultural practices, and few new trees characterize the woodlands in South Devon, England.

## PLANTING

BLUMER, FORSTINGENIEUR E. von. Neuartige lawinenverbauungen. Schweiz. Ztschr. f. Forstw. 93(6): 145-150. June 1942. 99.8 Sch9

Describes a new-type, small structure for the prevention of avalanches used in connection with an afforestation project.

BOURNE, RAY. A note on beech regeneration in southern England. Quart. Jour. Forestry 36(2): 42-49. July 1942. 99.8 Q2

Survival and development of seedlings depend primarily on the ground and soil conditions prevailing at the time of seed-fall, and secondarily on sufficient light and moisture for effective, physiological activity. The infrequency of mast (seed) years has complicated the management of beech-woods in the British Isles.

FARNSWORTH, C. EUGENE. Coniferous plantations on hardwood lands. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakena. Alumni News, 1940, pp. 32-33, 36. Wanakena, 1940. 99.9 N487

Draws general conclusions from the research project begun by the New York State Ranger School shortly after 1912 to indicate the most satisfactory procedure to follow in planting coniferous trees on hardwood lands. The cost as compared with the increased value of the new forest has not been determined as yet.

FORS, ALBERTO J. Reforestation by means of agricultural cultivation. Asoc. de Téc. Azucareros Cuba. Proc. (1941) 15: 225-228. 65.9 As5

Points out the advantages obtained from a timely combination of agricultural planting and forest regeneration as applied to hillsides or flat lands which have been deforested for a long time, giving examples of the use of such practices.



IOWA STATE COLLEGE. EXTENSION SERVICE. AAA soil-building program for Iowa in 1942. Iowa Agr. Col. Ext. Serv. Pam. 24, 16 pp. Ames, Mar. 1942. 275.29 I09Pa

Farm forestry, pp. 11-14. Lists varieties of trees recommended for wood lots, erosion control or protective plantings with instructions for planting and improvement.

MAKINS, F. K. Replanting softwoods. Quart. Jour. Forestry 36(2): 70-75. July 1942. 99.8 Q2

Presents tables giving the estimated yield in cubic contents and money of one acre planted with various species of softwoods. Data for the tables are taken from Forestry Commission Bulletin No. 10, "Youth and Yield of Conifers in Great Britain," 1926, and from prices prevailing in July 1939. From the information given, the financial merits of Douglas fir appear to be overwhelming, but because of its unusual liability to wind and snow break and its inability to grow in certain soils it should not always be planted. Sitka spruce, larch, Norway spruce and Corsican pine on lands which will grow nothing else can be recommended in certain localities.

MARRIOTT, CLIVE. Replanting under war conditions. Quart. Jour. Forestry 36(2): 49-53. July 1942. 99.8 Q2

In England only a small percentage of replanting is being carried out on felled areas, due to war conditions such as lack of labor, rise in the cost of plants, wire netting, wages, etc. The labor problem could probably be solved by using Italian prisoners of war in forest replanting now, and immediately after the war English men who are awaiting demobilization and re-absorption into civil life.

ORAMAS, J. MARTÍNEZ. Planting with tar-paper pots on difficult sites in Puerto Rico. Caribbean Forester 3(4): 158-163, processed. July 1942. 1.9622 T2C23

Describes the method and procedure used by the Forestry Division of the Puerto Rico Reconstruction Administration in planting with tar-paper pots on dry sites of forest lands located on the south and southwestern portion of the Island. Seedlings of West Indian mahogany were used, although pot planting of other species has been tried recently.

PIERSON, ROYALE K. With frost at hand your trees should be harnessed. Idaho Farmer 60(19): 439. Sept. 10, 1942. 6 G282

Wide variation in climate and soils in Idaho causes tree planter many problems.

### FOREST MEASUREMENTS

LOSER, G. T. B. Air photographs and forest sites. I. Mapping methods illustrated on an area of the Petawawa forest experiment station. Forestry Chron. 18(3): 129-144. Sept. 1942. References, pp. 143-144. 99.8 F7623

This, the first of two articles, presents an introductory discussion on the advantages and technique of mapping sites from air photographs, and describes in detail the mapping of sites of the Petawawa Forest Experiment Station.



MEYER, WALTER H. Yield of even-aged stands of loblolly pine in northern Louisiana. Yale Univ. School Forestry. Bul. 51, 39 pp. New Haven, 1942. References, p. 39. 99.9 YLB

Yield tables and charts represent northern Louisiana and, to a limited extent, southern Arkansas, a range poorly covered in past studies.

PARKER, H. A. Dominant height and average diameter as a measure of site in untreated even-aged lodgepole pine stands. Canada. Forest Serv. Silv. Res. Note 72, 19 pp., processed. Ottawa, Aug. 1942. References, p. 19. 99.9 C16Re

Kananaskis Forest Experiment Station, Project No. 27.

WHITELAW, E. W. Suggestions for the taking of a census in replanted or new planted areas. Rubber Res. Scheme, Ceylon. Quart. Cir. 18(4): 141-142. Dec. 1941. 78.9 C33Q

### FOREST RESOURCES

ALABAMA produced cork is new possibility. Ala. Conserv. 14(12, i.e.3): 9, 11. Sept. 1942. 279.8 All

Arrangements have been made for the planting of 150,000 cork acorns in Alabama. A cork oak planted near Greensboro in 1858 yielded 200 pounds of bark when stripped on July 29. Others exist in scattered areas over the State.

CANADA'S forest resources. Canada Lumberman 62(17): 38-41. Sept. 1, 1942. 99.81 C16

Eight regions rich in forest wealth, with softwoods in excess of hardwoods, stretch from coast to coast in Canada. Merchantable timber is estimated at something more than 300,000,000,000 cubic feet.

Reports from the provinces show that the 1941 production may not be reached this year due to the shortage of experienced labor in woods operations.

CLAPP, CECIL E. Naval stores a war necessity; "Turpentine belt" products assume new importance in nation's fight for peace; Alabama third ranking state in production of naval stores. Ala. Conserv. 14(11): 3, 12. Aug. 1942. 279.8 All

Lists improved turpentine practices which have materially increased the output.

CORK ADDED to proven list of crops Arizona can grow. Ariz. Farmer 21(18): 8, 12. Sept. 12, 1942. 6 Ar44

Cork grown on Arizona trees is of top quality, comparable to the best imported from Spain, Portugal or North Africa.

GLESINGER, EGON. Nazis in the woodpile. Sat. Evening Post 215(10): 19, 79-80. Sept. 5, 1942. 110 S

Having discovered that wood is the most versatile of raw materials capable of making up deficiencies in food, clothing, shelter, war essentials, and even motor fuel, the Nazis have acquired a network of forests and timber plants throughout Europe.

INDIAN timber. Indian Inform. 10(94): 550-556, illus. June 1, 1942. 280.8 In25

Discusses the demand for Indian timber by the army and the railroads, the skill required in felling and transporting the conifers of the Himalayas to the distant plains, the increasing demand for Indian teak, and the yield of timber in the Punjab.



LAWSON, E. L. Minnesota's state forests. Conserv. Volunteer 4(24): 1-4. Sept. 1942. 279.8 C765

Minnesota's state forests, established during the period of 1899 to 1941, cover an acreage of 5,385,518 acres, the largest among the states, and are becoming one of the most important natural resources of the state. The resources and physical features of the White Earth State Forest are described in particular.

NETTLETON, ARTHUR. In the famous forest of Dean. Forest & Outdoors, Sept. 1942, pp. 268-269, 281. 99.8 C16

The Forest of Dean, Gloucestershire, founded by England in 1938 as her first National Forestry Park, is providing timber and charcoal for war purposes and up-to-date methods have been introduced in charcoal burning. Mining of coal and iron has been revived, too, as a result of war needs.

OHIO. AGRICULTURAL EXPERIMENT STATION. Forest resources of Richland county, Ohio. Ohio Forest Survey. Rpt. 7, 65 pp., processed. Wooster, Mar. 1941. 99.9 Un32

Preliminary statistics and analysis, by Errett M. Conway.

Result of a state-wide study undertaken in cooperation with the Work Projects Administration to secure accurate information for each county concerning the location, condition, and marketing outlets for the forest resources of Ohio.

SCHMITT, JOHN J. Outlook for Latin-American forest resources. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakena. Alumni News, 1940, pp. 7-19. Wanakena, 1940. 99.9 N487

A review of present conditions in Latin American forests, considering the factors that have retarded development and the prospects for operations in the future.

### LUMBERING

BALM for Paul Bunyan's aching muscles. Timberman 43(11): 10-13, 28. Sept. 1942. 99.81 T484

Tree falling and bucking, with emphasis on the mechanical methods being used in recent years.

CUMMING, STANLEY. Maritime lumber and the war. Canada Lumberman 62(17): 76, 78. Sept. 1, 1942. 99.81 C16

The production of lumber by the Maritime Provinces decreased in 1941 and is likely to show a more decided decline for 1942, due largely to the labor supply problem. The placing of keymen in logging and sawmill operations in a deferred classification as in the United States has been proposed as a means of enabling the industry to operate at maximum production.

FRANCIS, S. Summer logging in eastern Canada. Forestry Chron. 18(3): 145-151. Sept. 1942. 99.8 F7623

Points out the main considerations in summer logging in Canada and summarizes its advantages and disadvantages.

HYLER, J. E. Cutting smooth thin veneer. Veneers and Plywood 36(9): 16-18. Sept. 1942. 99.82 V55

Use of equipment in good condition is one of the main essentials.



LIGHT weight drag saw fallers. Timberman 43(11): 14-15, 27. Sept. 1942. 99.81 T484

Outstanding among power saws built on the drag-saw principle is the Hansen lightweight timber falling dragsaw, built by the Hansen Machine & Welding Works of Eureka, California.

LYMAN timber company adopts combination of methods and equipment resulting in steady flow of logs. West Coast Lumberman 69(9): 10-13. Sept. 1942. 99.81 W52

Logging operations practiced by the Lyman Timber Company, Hamilton, Washington.

MITCHELL, TERRY. An "up-and-down" sawmill, relic of the old days. South. Lumber Jour. 46(9): 36. Sept. 10, 1942. 99.81 So8

Describes an old mill which was in use until eight years ago on a West Virginia farm.

NESS, H. J. How to fall "leaners." West Coast Lumberman 69(9): 36, 38. Sept. 1942. 99.81 W52

Describes a method of felling heavy, leaning trees sidewise or in such a position as to save much valuable timber.

SIEGWART, VON L. Über die holzflößerei im Napfgebiet. Schweiz. Ztschr. f. Forstw. 93(6): 138-145. June 1942. 99.8 Sch9

Presented from a historical viewpoint showing the early, wide use of wood-floating methods.

WACKERMAN, A. E. Pulpwood from logging operations. South. Lumberman, no. 2075, pp. 51-53. Sept. 15, 1942. 99.81 So82

By full cooperation in pulpwood and sawmill operations the best and fullest use of timber crops can be made with saw logs and pulpwood coming from the same land.

#### LUMBER DRYING

NEW DEVELOPMENT in handling of green lumber. Du Pont de Nemours, E. I. & Co. Agr. News Letter 10(5): 101-102. Sept.-Oct. 1942. 6 D92

Urea-starch paste offers a means of preventing or minimizing checking and splitting of lumber during the drying. Directions are included for the making and applying of this paste.

PINE laboratory discovers new lumber seasoning method. Timberman 43(11): 52-54, 77. Sept. 1942. 99.81 T484

Seasoning lumber by the extraction method was discovered while seeking for a way to prevent the discoloration of paint over the knot area. Additional work is to be done before the merits of the new process are stated with certainty.

SEASONING lumber for war purposes. West Coast Lumberman 69(9): 26, 28. Sept. 1942. 99.81 W52

Presents views given on this subject at the meeting of the West Coast Dry Kiln Club on Aug. 15 at Chehalis, Washington.

#### PRODUCTS UTILIZATION

ARMED services have used great quantities of lumber. Canada Lumberman 62(17): 43. Sept. 1, 1942. 99.81 C16

For the air force, navy and army, a total of 2,776 projects involving an expenditure of \$250,665,000 has been undertaken. A partial estimate of the amount of lumber used is given.



BELL, FREDERICK. Propellers for victory. Forest & Outdoors, Sept. 1942, pp. 278-279. 99.8 C16

Describes the manufacture of wooden propellers, or airscrews as they are technically called, by the R. Laidlaw Lumber Company of Toronto for R. C. A. F. trainers.

CANADA. BUR. OF STATISTICS. FORESTRY BRANCH. Preliminary report on the pulp and paper industry in Canada, 1941. 21 pp., processed. Ottawa, 1942. 302.9 C162

CONSERVATION order M-208. Amer. Lumberman, no. 3238, pp. 32-34. Sept. 5, 1942. 99.81 Am3

Explains the main points, and gives the text of the new conservation order placing softwood lumber under the priorities system.

Amendment no. 1 in Calif. Lumber Merchant 21(6): 15. Sept. 15, 1942. 99.81 C12

DAVIS, ELRICK B. The rediscovery of wood. Amer. Forests 48(9): 395-397, 418, 428-430. Sept. 1942. 99.8 F762

The Germans wear fabrics made from wood; eat wood sugars, wood proteins and cheese and meat from wood-fed animals; move in woodgas-driven trucks, greased with tree-stump lubricants and run on Buna tires made from wood alcohol; shoot explosives manufactured from waste liquors obtained from wood pulp mills; fly in plywood planes; and have motion-picture records of the action taken on film of wood cellulose acetate. Today wood is called "Universalrohstoff" in Germany meaning "the material of which anything can be made."

The United Nations are now doing what Germany has done, and even finding new uses for wood. Outstanding developments in wood plastics and plywoods are among the American contributions.

DEFINITIONS of defects. Wood 7(7): 127-128. July 1942. 99.82 W855

Lists some of the rules for cypress grading demonstrating the close regulation required by the National Hardwood Lumber Association in its revised rules, effective January 1st.

FELLOWS, E. S. Role of forest products laboratories. Canada Lumberman 62(17): 72, 74. Sept. 1, 1942. 99.81 C16

The types of work demanded of the Laboratories may be classified broadly as advisory, investigative, consultative, and educational.

FOUQUETTE, DANIEL J. FHA explains present status of home building, repairing and maintenance; urges use of Title 1 provisions to keep homes from deteriorating as well as to convert unused areas in houses into living quarters for essential workers. Miss. Val. Lumberman 73(34): 10-12. Aug. 21, 1942. 99.81 M69

Wood was used as exterior material for about 80 per cent of the homes built by FHA in 1940 for less than \$2,000, for about 83 per cent of those costing \$2,000 to \$3,000, and for a gradually declining per cent of those costing over \$3,000. An interesting market for building material industries still exists in lower cost war housing and in maintenance of present structures.

HERRICK, GEORGE. Wood transport planes - now and to come. Veneers and Plywood 36(9): 10-12. Sept. 1942. 99.82 V55

Points out the value of wood in its latest form, plastic-bonded plywood, as aircraft material for military usage now and for civilian transports later.



JAMES, M. C. Washington forest products cooperative. Northwest Sci. 16(3): 76-78. Aug. 1942. 470 N81

Address before the Forestry Section of the Northwest Scientific Association, Spokane, Wash., Dec. 29, 1941.

A brief history of the Washington Forest Products Cooperative Association.

JUNGO, J. Construisons en bois. Jour. Forest. Suisse 93(7): 146-150. July 1942. 99.8 J82

Discusses the use of wood in the building of bridges, and describes in detail the bridge of Hoellbach in the canton of Fribourg, a covered bridge, constructed entirely of wood in 1939.

McELHANNEY, T. A. The age of plywood and resins. Forest & Outdoors, Sept. 1942, pp. 263-264, 274. 99.8 C16

The recent development in the field of plywoods, veneers, compressed and compregnated wood has depended to a large degree on improvements in veneer-cutting equipment and to an even larger degree in the adhesives used. New uses for plywoods in the industrial field are growing constantly. Quality instead of quantity in forest management may be stressed in the future due to the demand by the plywood industry for the choicest logs of the forest.

MARIAN, S. Forestry charcoal production. Quart. Jour. Forestry 36(2): 54-59. July 1942. 99.8 Q2

Raw materials used, moisture content, preparation and structure of the wood, atmospheric conditions, and kilns, play an important part in the skilled job of producing charcoal.

MULLER, JOSEPH L., and SLIFKO, CHARLES W. The lumber industry under wartime conditions. U. S. Bur. Foreign and Dom. Com. Survey of Current Business 22(8): 18-23. Aug. 1942. 157.7 C76Ds

Discussion and statistics on the production, supply, and demand situation with respect to lumber, under wartime conditions.

PULP AND PAPER INDUSTRY. ADVISORY COMMITTEE. Proceedings of meeting. South. Pulp and Paper Jour. 5(3): 11-12. Aug. 1942. 302.8 So8

Based upon a recent pulpwood survey, the Forest Service estimated that 6,500,000 cords of domestic wood could be delivered to the pulp and paper industries during the latter half of 1942, provided substitute means of transportation are used.

RECORD, SAMUEL J. Utilization of Latin American forests. Tropical Woods, no. 70, pp. 15-19. June 1, 1942. 99.08 Y1Tr

Problems in the utilization of Latin American forests are concerned with local utilization of the lumber and the development of an export trade for it. France before the war is cited as affording a good example of the proper procedure for overcoming a similar problem.

SLIFKO, CHARLES W. U. S. Department of commerce discusses current condition of lumber industry. Miss. Val. Lumberman 73(34): 13, 30-31. Aug. 21, 1942. 99.81 M69

The first six months of 1942 show a wide and practically consistent excess of orders and shipments over output, with orders for softwoods ranging 26 per cent above production and those for hardwoods 12 per cent higher. Reasons for production shortage vary, but loss of labor, difficulty in prompt procurement of operating equipment, reduced log supplies and unfavorable weather conditions are the main handicaps.



WESTERN hemlock and noble fir; now on parity with Sitka spruce in aircraft construction. Timberman 43(11): 22, 24. Sept. 1942. 99.81 T484

### WOOD AS FUEL

BELYEA, HAROLD C. Wood for fuel. Rural New Yorker 101(5536): 442-444. Aug. 22, 1942. 6 R88

Wood fuel from the 70 million acres in woodlots located within 300 miles of the Atlantic seaboard can be utilized during the national emergency if the problems of silviculture, marketing and transportation can be solved satisfactorily.

RECKNAGEL, A. B., and POND, J. D. Fuel wood from farm woodlands. N. Y. Agr. Col. (Cornell) Ext. Bul. 495 (War Emergency Bul. 14), 4 pp. Ithaca, 1942. 275.29 N48E

Information on cutting, seasoning and heating value of fuel wood.

### WOOD PRESERVATION

CREOSOTED piles in river jetties, permeable and impermeable. Wood Preserv. News 20(8): 96-98, 104. Aug. 1942. 300.8 W853

Cites examples and illustrations of permeable and impermeable jetties in use.

HARRAR, E. S., and REID, D. G. Retention of creosote oil in the wood of *Pinus occidentalis* Swartz. Yale Univ. School Forestry. Trop. Woods 71, pp. 33-35. Sept. 1, 1942. 99.08 Y1Tr

Reports the results of a series of oil impregnation experiments on wood of Haitian Pine.

MANY Kansas state parks use creosoted fence posts. Wood Preserv. News 20(8): 100-103. Aug. 1942. 300.8 W853

1941 TREATED timber output increases 20 per cent over previous year; output of creosoted foundation piles, treated lumber and timber and poles greater than in any previous year. Wood Preserv. News 20(8): 92-94, 103. Aug. 1942. 300.8 W853

Tables give 1940 and 1941 statistics showing number of ties, poles, etc., treated by quantity and by species of wood.

### WOOD TECHNOLOGY

BLOOM, PHILIP, JAHN, E. C., and WISE, L. E. Monoethanolamine extraction of wood for the determination of cellulose. Paper Trade Jour. 115(10): 33-40. Sept. 3, 1942. Literature cited, p. 40. 302.8 P196

"Factors influencing the delignification of aspen and Sitka spruce by monoethanolamine, such as time, temperature, particle size, and liquor ration, were studied. Alpha-cellulose digested in monoethanolamine suffered practically no loss, but aspen holocellulose lost about 18% leaving a residual cellulose equivalent in yield to that obtained directly from the wood by the Cross and Bevan method.

"A suitable method for determining cellulose in wood is to digest 60-80 mesh sawdust in monoethanolamine for 2 hours at 168-170 deg. C., followed by chlorine water-sodium sulphite treatments (2 for hardwoods and 3 for softwoods). Celluloses obtained by the usual Cross and Bevan method and the monoethanolamine procedure are broadly similar in their chemical composition."



BRAY, MARK W. Recovery of fats, waxes, resins, and turpentine from wood. Paper Trade Jour. 115(10): 41-42. Sept. 3, 1942. Literature cited, p. 42. 302.8 P196

Considerable interest in new sources of fats and other strategic materials has developed because of war shortages. Some of the possibilities of recovering fats from the 16 million cords of wood used yearly by the pulp industries are discussed.

HOT WINGS and cold set resins. Mod. Plastics 20(1): 52-55. Sept. 1942. 309.8 P69

"The new developments in airplane construction are tending more and more to the use of plastic-plywood and plastic resins principally because of their lightweight construction and great strength."

HOWARD-JONES, J. Chemistry aids forest industries. Canada Lumberman 62(17): 42-43. Sept. 1, 1942. 99.81 C16

Through techniques discovered in research, mold, sap stain and the high inflammability of lumber are being brought under control; plywood is being used as an important alternative for steel and duralumin in aircraft production, automobile body parts, skis, and many other articles; and greater emphasis is being placed on cellulose utilization.

McCLURE, JOHN W. "In war as essential as bread." Canada Lumberman 62(17): 53-54. Sept. 1, 1942. 99.81 C16

The oldest material first in use by primitive man, wood is also the newest material in terms of modern developments in technical research. In general usefulness, as a substitute for critical materials, and in startling new discoveries such as the treatment of resin bonded and impregnated plywoods with pressure and heat to make them stronger than metal, weight for weight, wood is proving that it is "the most important raw material of the future."

MEILER, JOHN G. Lignin-enriched filler. Mod. Plastics 20(1): 64-66, 128, 130. Sept. 1942. 309.8 P69

MODERN chemistry expands lumber uses. Amer. Lumberman, no. 3238, p. 28. Sept. 5, 1942. 99.81 Am3

Wood fibers for clothing, wood sugars for cattle feed, alcohol, yeast, glucose, and lactic acids, and chemical ingredients for camphor, are some of the new uses for lumber.

NELSON, JOHN D., and D'ALELIO, G. F. Low pressure laminating. Mod. Plastics 20(1): 45-47, 122, 124. Sept. 1942. 309.8 P69

PERRY, THOMAS D. Scarfed joints in plywood. Mod. Plastics 20(1): 74-75, 116, 118, 120. Sept. 1942. 309.8 P69

A PRODUCT to be conjured with. Canada Lumberman 62(17): 68, 70. Sept. 1, 1942. 99.81 C16

For construction, food production, and as material for the army, navy, air and marine forces, the increasing uses of plywood are little short of phenomenal. Its great strength, weather resistance, lightness and low cost partly account for its indispensability in wartime. The developments of plywood after the war will be one of the most interesting phases of the lumber industry.

A list of Canadian companies producing plywoods is included.

STEVENS, W. C., and TURNER, N. Chemical bending; the influence of urea treatments on the bending and setting properties of wood laminations. Wood 7(7): 123-126. July 1942. 99.82 W855

Reports tests carried out at the Forest Products Laboratory, Madison,



Wisconsin, to compare the bending, setting and shape-retaining properties of laminations from beech, oak and Sitka spruce treated according to the urea process, with similar material treated in boiling water.

### RANGE MANAGEMENT

BISWELL, H. H., and FOSTER, J. E. Forest grazing and beef cattle production in the Coastal plain of North Carolina; results of a survey of 100 cattle producing farms. N. C. Agr. Expt. Sta. Bul. 334, 22 pp. Raleigh, 1942. 100 N81

The North Carolina State College, the North Carolina Dept. of Agriculture, and the U. S. Dept. of Agriculture through the Forest Service and the Bureaus of Animal Industry and Plant Industry co-operated in presenting this report which briefly describes the Coastal Plain area, gives the findings of the survey, and points out some of the problems and desirable practices in using forest land for the grazing of cattle.

DAVIS, KENNETH, and HAYS, ORVILLE E. Farms the rains can't take. U. S. Dept. Agr. Misc. Pub. 394, 14 pp. Washington, D. C., 1942. 1 Ag84M

A comparison between grazed woodland and pasture, pp. 11-13. Wooded areas provide relatively small nourishment for livestock, and show a high run-off and soil loss, as compared to that from pasture land.

### WILDLIFE

CONKLIN, W. GARD. A rich heritage; state game lands pass 700,000 acre mark. Pa. Game News 13(5): 3, 22-23, 32. Aug. 1942. 412.9 P38Pe

Pennsylvania's State Game Lands acquired during a period of 22 years, and located in 61 of the state's 67 counties, are used primarily for public hunting and wildlife refuge purposes. Revenue from the sale of forest products will probably equal the purchase price of the lands in time.

KING, R. T., DENCE, W. A., and WEBB, W. L. History, policy and program of the Huntington wildlife forest station. Roosevelt Wild Life [Syracuse Univ.] Bul. 7(4): 388-505. Sept. 1941. List of references, pp. 459-460, 504-505. 410.9 R67

Contents: Pt. I. History, Policy and Program of the Huntington Wildlife Forest Station, by R. T. King, W. A. Dence and W. L. Webb, pp. 393-460; Pt. II. Forest Zoology and Its Relation to a Wildlife Program on the Huntington Forest, by R. T. King, pp. 461-505.

MOORE, GEORGE C. Alabama--and the Pittman-Robertson act; Game division has received \$115,483.58 for wildlife restoration projects. Ala. Conserv. 14(12): 4, 14. Sept. 1942. 279.8 A11

MUSGROVE, JACK. Wanton cutting of den trees causes huge loss to nature. Iowa Conserv. 1(8): 8. Sept. 15, 1942. 279 Io92

OHLMAN, R. G., and SWEARS, C. C. Attention: Foresters and game men. N. Y. State Col. Forestry, Syracuse Univ. State Ranger School, Wanakona. Alumni News, 1940, pp. 37-40. Wanakena, 1940. Literature cited, p. 40. 99.9 N487

The influence of the forest on wildlife and of wildlife on the forest is still a controversial subject, but steps are underway to determine how integration can be achieved.



ORENDURFF, CARROLL F. The first wildlife inventory of Nebraska shelterbelts. Nebr. Bird Rev. 9(1): 7-8. Jan.--June, 1941. 413.8 N27

In 1940 a questionnaire was sent to owners of Nebraska farm shelterbelts, which had been planted several years earlier by the U. S. Forest Service, to determine the value of the shelterbelts to wildlife in Nebraska. A summary of the answers given indicates that wildlife is being benefited materially by the shelterbelts.

RÜEDI, K. Wald und wild. Schweiz. Ztschr. f. Forstw. 93(6): 151-155. June 1942. 99.8 Sch9

The problem of damage to forests by game, including methods of prevention.

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SECTION E  
FORESTRY

Vol. 1

October 1942

No. 4

The Bibliography of Agriculture is issued monthly  
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Vol. 1

October 1942

No. 4

GENERAL FORESTRY

- BOMBAY (PRESIDENCY). FOREST DEPT. Report 1940-1941. 2 pts. Bombay, 1942. 99.9 In2Bo  
Pt. I is the general report. Pt. II contains the appendices which present statistical tables on forestry in 1940-1941.
- COUNTY forestry progress noted. Wis. Counties 5(3): 6, 18-19. Sept. 1942. Reports results in management and policy.
- OHIO. AGRICULTURAL EXPERIMENT STATION. Progress of agricultural research in Ohio, 1938-1939; fifty-eighth annual report. Ohio. Agr. Expt. Sta. Bul. 617, 89 pp. Wooster, Dec. 1940. 100 Oh3S  
Forests and recreation, pp. 73-79. Reports on forest fires, State forests, game refuges, forest surveys, white pine blister rust control, etc.
- RATHBURN, LAWRENCE W. Forestry as a profitable form of farm land use. Amer. Jour. Econ. and Sociol. 1(4): 454-459. July 1942. 280.8 Am393  
Address before the National Resources Planning Board Committee, Boston, Oct. 28, 1941.  
Making forestry a profitable form of farm land use depends not altogether on resources, technical knowledge, labor, and available capital and credit, but also on modifying the existing tax on growing timber.
- U. S. FOREST SERVICE. List of state forestry agencies. 6 pp., processed. Washington, D. C., Jan. 2, 1942. (B-2) 1.9 F7681B
- U. S. FOREST SERVICE. CALIFORNIA REGION. Lassen national forest, California. Mt. Diablo meridian. [Map] Washington, D. C., 1940. 1 F769La
- U. S. FOREST SERVICE. CALIFORNIA REGION. Madoc national forest, California. Mt. Diablo meridian. 1941. [Map] Washington, D. C., 1942. 1 F769Mo

FOREST ADMINISTRATION AND POLICY

- BRASNETT, N. V. Finance and the Colonial forest service. Empire Forestry Jour. 21(1): 7-11. 1942. References, p. 11. 99.8 Em72  
Reviews forest policies in the Colonial Empire and presents suggestions for placing Colonial forestry on a more paying basis.
- CALIFORNIA plans state forest system. West Coast Lumberman 69(10): 36. Oct. 1942. 99.81 W52  
Concerns the acquiring of "suitable and desirable cutover lands" as State forests.
- NAVARRO, RAMÓN A. La difusión del árbol en Córdoba. Córdoba. Bol. de Agr. y Ganad. no. 178, pp. 140-141, 142. July-Dec. 1940; no. 179, pp. 109-110. Jan.-June 1941. 9 C81Bo  
Urges the creation of a forestry protection and promotion section under the Córdoba Agricultural Administration (Dirección de Agropecuaria) which

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\*References on forest entomology are included in Section C, Entomology; references on forest botany in Section D, Plant Science.

would keep a register of nurseries producing trees and of seed producers, conduct experiments on species and varieties of forest and fruit trees, trace systems of propagation and otherwise insure the growing of trees that are healthy and of proper species.

RODGER, ALEXANDER. Forestry in the colonies. Empire Forestry Jour. 21(1): 21-25. 1942. 99.8 Em72

Examines forestry methods used in the twenty colonial dependencies which have a forest area of 600,000 square miles, with a view to pointing out their weaknesses.

STODDARD, CHARLES H., JR. Future of private forest land ownership in the northern lake states. Jour. Land and Pub. Util. Econ. 18(3): 267-283. Aug. 1942. 282.8 J82

A representative area in northwestern Wisconsin made up of five counties was selected for study of the factors affecting private ownership. Information concerning "how, why and when present owners acquired their lands, what types of owners there are and how much land they control, what use they make of them, what factors have influenced their present attitude and future plans toward their lands" was secured by means of mail questionnaires.

WHITTICK, ARNOLD. National parks. Wood 7(8): 140-142. Aug. 1942. 99.82 W855

Proposed plan for afforested national parks in Great Britain.

#### FOREST FIRE PROTECTION

CARELESS matches aid the Axis. Ala. Conserv. 14(4): 3. Oct. 1942. 279.8 All

The South faces a graver fire menace than ever before. Alabama and other southern states are making organized efforts to control forest fires, 99% of which are man-caused.

DOING big things with little machines. Timberman 43(12): 38, 40, 42. Oct. 1942. 99.81 T484

The Forest Service has designed a small tractor, a narrow-tread, jeep-type truck, and a portable trail compressor, all of which are expected to revolutionize fire protection schemes for remote areas.

FIRE BEHAVIOR research by the California forest and range experiment station, San Dimas experimental forest. Conserv. Activ. 10(9): 72-73. Sept. 1942. 279.9 C763

Research to determine the fundamental laws governing rate of spread of fire in different forest type fuels.

FIRE REPORT. Conserv. Activ. 10(9): 75-76. Sept. 1942. 279.9 C763

Includes a comparative record of valley and forest fires in southern California for 1940, 1941 and 1942 as of July 31, 1942.

FOREST "black-outs" in critical areas. Ala. Conserv. 14(4): 6. Oct. 1942. 279.8 All

Alabama is authorized to use stern measures if necessary to prevent forest fires in areas of military importance.

KNORR, PHILIP. Variations in fire-danger factors on a ranger district in longleaf pine region. Jour. Forestry 40(9): 689-692. Sept. 1942. Bibliographical footnotes. 99.8 F768

An area, 15 miles wide by 40 miles long, east of Brewton, Alabama, was selected for this study. Tables give statistics on variations observed.



McCLURE, JAMES G. K. Fire - public enemy no. 1 of the forest. Farmers Fed. News 23(2): 9-10. Oct. 1942. 280.28 F225

Urges the appropriation of nine million dollars by the Federal government matched by an equal amount from the State governments for forest-fire control.

MILLER, G. L. New Brunswick's largest fire department. Empire Forestry Jour. 21(1): 30-34. 1942. 99.8 Em72

Steps taken by the New Brunswick Forest Service to protect its 14,000,000 acres of forest land from fires.

REED, R. T. Save farm woodlands from fire. Farmers Fed. News 23(2): 3. Oct. 1942. 280.28 F225

Refers in particular to the 937 separate woods fires in western North Carolina during 1941.

RISE, CARL H. Fire in the forest. Natl. Safety News 46(4): 64-65, 132-135. Oct. 1942. 449.8 N212

The enormous demand for lumber in wartime in conjunction with the fact that our timber resources are not inexhaustible makes conservation measures necessary. Quick detection of forest fires, rapid arrival of suppression crew, and quick and efficient work in getting entirely rid of the fire are essential in fire-suppression measures.

ROGERS, DAVID H. Measuring the efficiency of fire control in California chaparral. Jour. Forestry 40(9): 697-703. Sept. 1942. 99.8 F768

Because of old burns the fire-control job is said to be a fluctuating one particularly in chaparral types. A formula is demonstrated which is based on burned areas, and proposes to be more accurate and efficient because of recognizing the effects of old burns.

TAUSCH, LOUIS, JR. Fire control and fire control roads in Nicolet national forest. (To be concluded) Roads and Streets 85(9): 54-56, 60-62, 64, 66, 68. Sept. 1942. 288.8 R536

An organization chart, tables and other illustrations are used in describing the problem and methods of controlling forest fires in the Nicolet National Forest, particularly in the Argonne District.

WARDEN, JAMES. Armbands in the forest. Amer. Forests 48(10): 451-452, 472. Oct. 1942. 99.8 F762

The Forest Fire Fighters Service (FFFS) created by an administrative order dated July 11, 1942, is being organized in the states to train civilian fire fighters in protecting our forests.

### FOREST INFLUENCES

GUTIÉRREZ, SAMUEL. Nuestra riqueza forestal. Córdoba. Bol. de Agr. y Ganad. no. 178, pp. 144, 145. July-Dec. 1940. 9 C81Bc

Brings out the importance of forests in combatting soil erosion, and urges Córdoba farmers to plant trees.

RINGLE, RUTH. Trees that are their brothers' keepers. Amer. Forests 48(10): 448-450, 474-475. Oct. 1942. 99.8 F762

Windbreaks of eucalyptus, or blue gum, protect orange, grapefruit and lemon groves of California by reducing wind velocity and the resulting damage to orchards from 28 to 40 per cent.

FOREST MANAGEMENT

BEDNALL, B. H. Jarrah coppice cleaning: a report on experimental work in jarrah (*Eucalyptus marginata*) coppice, nine years old in 1941. Austral. Forestry 6(2): 104-111. 1942. 99.8 Aw74

Shows the effect of experimental treatments made in reducing number of shoots on each stump.

CASALETTI ARANCIBIA, CARLOS. Plantas forestales. (Forest plantations). Córdoba. Bol. de Agr. y Ganad. no. 177, pp. 54, 56. May-June 1940.

9 C81Bo  
Climate and soil, preparation of the soil, and other considerations in the cultivation of forestry trees.

CHANDLER, JOHN M. The place of woodland in the farm organization in Coos county, New Hampshire. N. H. Agr. Expt. Sta. Bul. 337, 34 pp. Durham, 1942. 100 N45

In cooperation with the U. S. Bureau of Agricultural Economics.

Study made to evaluate the possibilities of increasing the net farm income in Coos County by altering the farm organization to include forestry as a supplementary undertaking, and by a more economical use of forest and agricultural resources.

CONDIT, G. R., HUBERMAN, M. A., and McGUIRE, JOHN R. Collect the bounty on your wolf-trees. Jour. Forestry 40(9): 680-682. Sept. 1942. 99.8 F768

Results of a study made on, and near, the Massabesic Experimental Forest in southwestern Maine to study the origin of wolf-trees, their effect upon the stand, and the possibility of profitable removal of these trees.

De FIRTREE, G. Afterthoughts on the legend of the good German forester and the spruce that would not grow. Empire Forestry Jour. 21(1): 26-29. 1942. 99.8 Em72

Believes that a well-thinned plantation where no undecomposed litter collects, and where there is sufficient root space, will be a better growing place for spruce forests than the European stands where broad-leaf varieties are mixed with spruce and other conifers.

EIRE FORESTRY. Timber Trades Jour. 132(3443): 326. Aug. 22, 1942. 99.81 T48

The Forestry Act calls for compulsory tree planting to replace the 2,000,000 trees being cut annually. Serious difficulties such as lack of fencing material, lack of seeds and of tree stock, make extensive replanting impossible at present.

HEDGE and tree-stump clearing. [Gt. Brit.] Min. Agr. and Fisheries Bul. 101, 13 pp. London, 1942. 10 G794B

Lists the chief methods of hedge and tree-stump clearing under four groups: hand methods, power methods, use of explosives, and chemical methods.

LIEFELD, T. A., and CHAPMAN, R. A. Preliminary analysis of commercial acid-stimulation tests under the 1942 naval stores conservation program. Amer. Turpentine Farmers Assoc. 4(12): 7, 11. Sept. 1942. 309.3 Am3

Based on 20 producers with a 100 per cent count amounting to 157,167 faces.



McCAMMOND, DON. War's devastation in American timberlands. Christian Sci. Monitor Weekly Mag. Sect., Sept. 26, 1942, pp. 2-3.

Regulation of cutting practices and increased fire protection are necessary to insure our timber supply for the future.

MARKETING and harvesting farm timber. Wis. Agr. Col. Ext. Spec. Cir. [unnumb.] 23 pp., processed. Madison, Sept. 1942. 275.29 W75S

Issued in cooperation with U. S. Soil Conservation Service.

PERRY, CLAY. When the mills go down. Amer. Forests 48(10): 453-455, 479-480. Oct. 1942. 99.8 F762

On the reclamation and restoration of the cut-over forests of the Upper Peninsular of Michigan. Reforestation projects, game sanctuaries, hunting areas, and public and private resorts and camps are being organized.

PERSON, HUBERT L., and HALLIN, WILLIAM. Natural restocking of redwood cutover lands. Jour. Forestry 40(9): 683-688. Sept. 1942. Bibliographical footnotes. 99.8 F768

Basic data for this paper are from a study of restocking of redwood lands, effectiveness of possible seed sources and influence of slash and slash fires on natural reproduction in Humboldt and Mendocino Counties, California.

PLAN de reforestación. Córdoba. Bol. de Agr. y Ganad., no. 180-181, pp. 46-61. Jan.-Apr. 1942. 9 C81Bo

The reforestation plan provides for experimenting with, and propagating, the best species of fruit and forest trees in quantities sufficient for the more urgent needs of the Province of Córdoba.

ROBERTSON, W. M. Use of transect sample plots in the study of conditions on cut-over lands. Pulp and Paper Mag. Canada 43(10): 769-772. Sept. 1942. 302.8 P96

Transect sample plot system was developed by the Dominion Forest Service in 1936 as a simple, inexpensive method for studying experimental cutting areas and to determine the effect of cutting upon the restocking of the area.

TILLOTSON, C. R. Care and improvement of the farm woods. U. S. Dept. Agr. Farmers' Bul. 1177, 25 pp. Washington, D. C., rev. 1941. 1 Ag84F

Points out methods of caring for and improving farm woodlands so as to make them contribute as fully as possible to the owner's convenience and income. Table 3 shows the Average growth of various species in different regions.

## PLANTING

ARE YOU growing gullies or trees? N. C. Agr. Col. Ext. Cir. 255, 16 pp. [Raleigh] 1942. 275.29 N811

Describes methods of controlling erosion on small areas by using filler material found on the average farm and by planting trees.

DIENA, MANUEL. La escasez de papel y la plantación de árboles. (The scarcity of paper and the planting of trees.) Campo y Arados [Montevideo] 6(66): 30-31, 46. Aug. 1942. 9.9 C152

FORESTER, A. War-time afforestation. Estate Mag. 42(9): 294-295. Sept. 1942. 10 Es8

Points out the necessity for afforestation at the present time, and economic measures to use.

GREEN ramparts for our prairie farms. Forest and Outdoors, Oct. 1942, pp. 301-302. 99.8 C16

Presents an account of the tree planting work which the Dominion Government has conducted in the Prairie Provinces prior to and since the passage of the Prairie Farm Rehabilitation Act (P.F.R.A.) in April 1935.

HARRINGTON, C. L. The spring tree planting period. Wis. Conserv.

Bul. 7(9): 29. Sept. 1942. 279.8 W752

Twenty million trees were handled during the 1942 spring season.

PRYOR, L. D. Plant succession and pine regeneration. Austral.

Forestry 6(2): 87-96. 1942. Literature references, p. 96.

99.8 Aw74

Effect of planting pine stands on relatively stable grassland communities and the resulting pine dominated community.

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DOUGLASS, A. E. Notes on the technique of tree-ring analysis, III. Charcoal treatment. Tree-Ring Bul. 8(2): 10-16. Oct. 1941. 99.8 T713

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FOUR METHODS of scaling logs; comparison of Ontario, New Brunswick, Quebec and Tiemann rules. Pulp and Paper Mag. Canada 43(10): 776. Sept. 1942. 302.8 P96

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Thailand - Teak, pp. 63-65.

CANN, JAMES J. Forest resources of Logan county, Ohio. Ohio Forest Survey Rpt. 17, 57 pp., processed. Wooster, Ohio, June 1942.

99.9 Un32

Forest conditions, location and scope of existing forest resources, and market outlets of Logan County, Ohio.

CLAPP, ROBERT T. The Yale forests, 1942. Yale Forest School News 30(4): 54. Oct. 1942. 99.8 Y1

The condition of the Yale forests and their future development.

CRAWMER, J. RICHARD, and PENNOCK, GILBERT L. Forest resources of Holmes county, Ohio. Ohio Forest Survey Rpt. 18, 68 pp., processed.

Wooster; Ohio, Aug. 1942. 99.9 Un32

Forest conditions, location and scope of existing forest resources, and market outlets of Holmes County, Ohio.

CRAWMER, J. RICHARD. Forest resources of Stark county, Ohio. Ohio Forest Survey Rpt. 11, 68 pp., processed. Wooster, Feb. 1942.

99.9 Un32

Forest conditions, location and scope of existing forest resources, and market outlets of Stark County, Ohio.



GALICIA, DANIEL F. Trabajos preliminares de ordenación de bosques, propiedad de indígenas Tarahumaras. [Mex.] Dir. Gen. de Forest. y de Caza. Bol. Bimestral 3(2): 12-17. Mar.-Apr. 1942. 99.9 M574

For social and economic reasons and as a step in forest conservation, the Mexican Government has initiated a program for the study of the ejido and common land holdings of the Tarahumaras Indians. The preliminary work described in this article will be followed by later information on the progress of the work.

GYSSEL, LESLIE W. Forest resources of Auglaize county, Ohio. Ohio Forest Survey Rpt. 13, 75 pp., processed. Wooster, Nov. 1941. 99.9 Un32

Forest conditions, location and scope of existing forest resources, and market outlets of Auglaize County, Ohio.

KAHN, S. HENRY. U. S. A. timber in defence. Wood 7(8): 137-139. Aug. 1942. 99.82 W855

Supply and utilization for war purposes.

MELL, CLAYTON D. Timber conditions in Mexico. Pulp and Paper Mag. Canada 43(10): 775. Sept. 1942. 302.8 P96

More than half of Mexico is arid or semi-arid, and the remainder has an open growth of trees composed largely of oaks and conifers or a jungle like growth where no particular species predominates.

ROTHACHER, JACK S. Forest resources of Clinton county, Ohio. Ohio Forest Survey Rpt. 15, 61 pp., processed. Wooster, May 1942. 99.9 Un32

Forest conditions, location and scope of existing forest resources, and market outlets of Clinton County, Ohio.

TIEMANN, HARRY D. The Australian bush. South. Lumberman 164(2067): 47-49. May 15, 1942; 165(2077): 54-55. Oct. 15, 1942. 99.81 So82

Describes the country and the native "bush" in Australia in 1921 when modern methods were just beginning to come in. A map shows the forests of Australia.

TONTI, EDWARD A. Forest resources of Madison county, Ohio. Ohio Forest Survey Rpt. 12, 47 pp., processed. Wooster, Oct. 1941. 99.9 Un32

Forest conditions, location and scope of existing forest resources, and market outlets of Madison County, Ohio.

TRENK, FRED B. Harvest tops state tree growth. Wis. Counties 5(3): 10, 18. Sept. 1942.

Reports on a survey made during the winter of 1940-41 of the Central Wisconsin forest area to determine what and how much timber was being cut for market.

ULMER, JACOB S. Forest resources of Mahoning county, Ohio. Ohio Forest Survey Rpt. 14, 65 pp., processed. Wooster, Apr. 1942. 99.9 Un32

Forest conditions, location and scope of existing forest resources, and market outlets of Mahoning County, Ohio.

U. S. FOREST SERVICE. LAKE STATES FOREST EXPERIMENT STATION. Michigan lumber production largest since 1929. U. S. Forest Serv. Lake States Forest Expt. Sta. Tech. Notes 191, 2 pp., processed. University Farm, St. Paul, July 1942. 1.9 F7625T

U. S. FOREST SERVICE. LAKE STATES FOREST EXPERIMENT STATION. Minnesota lumber cut largest in eleven years. U. S. Forest Serv. Lake States Forest Expt. Sta. Tech. Notes 192, 2 pp., processed. University Farm, St. Paul, July 1942. 1.9 F7625T

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- U. S. FOREST SERVICE. NORTHERN ROCKY MOUNTAIN FOREST AND RANGE EXPERIMENT STATION. Highlights of the forest situation in Deerlodge county (west of Continental Divide). U. S. Forest Serv. North. Rocky Mountain Forest and Range Expt. Sta. Forest Survey Statis. Serv. 10, 13 pp., processed. Missoula, Mont., June 1942. 1.9622 N3F761
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- U. S. FOREST SERVICE. NORTHERN ROCKY MOUNTAIN FOREST AND RANGE EXPERIMENT STATION. Lumber production for the northern Rocky mountain region during 1940 and 1941. 2 pp., processed. Missoula, Mont., 1942. 1.9 F7628L

Mimeographed table temporarily replacing the multilithed publication entitled, Lumber Production for the Northern Rocky Mountain Region, first issued in 1937.

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- ACCIDENT rates in the lumber industry. South. Lumberman 165(2077): 51-52. Oct. 15, 1942. 99.81 So82
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- CANADA. FOREST SERVICE. Map showing saw mills of eastern Canada. 1941. 99.76 C163
- Accompanied by a 22-page processed list: Saw mills of eastern Canada, 1940.



CANADA. FOREST SERVICE. Map showing saw mills of western Canada.

1941. 99.76 C163Wq

Accompanied by a 6-page processed list: Saw mills of western Canada, 1940.

CONVERTING round timber. Timber Trades Jour. 162(3444): 373-375.

Aug. 29, 1942. 99.81 T48

Points out the wasteful characteristics of the circular rack bench used in many mills throughout the country.

KEY, ALEXANDER. The swamps go to war. Sat. Evening Post 215(15): 26-27, 63. Oct. 10, 1942. 110 S

Lumbering in the swamps of the Apalachicola River in Florida, where the pullboat is king.

KOROLEFF, A. Pulpwood cutting; efficiency of technique. 122 pp.

Montreal, Canadian pulp & paper assoc., 1941. 99.76 K84

This is the first part of a program, conducted by the Woodlands Section of the Canadian Pulp and Paper Association, to establish a reliable foundation for the technical guidance of woods labor.

Other major phases of logging practice such as skidding, loading, hauling and water transportation are planned to follow later.

LOG PRELOADER cuts hauling costs. Canada Lumberman 62(9): 10-12.

Oct. 1, 1942. 99.81 C16

Describes log preloading equipment and operations.

PARSONS, H. H. Application of tractor and allied equipment in logging operations. Canada Lumberman 62(20): 19, 22-23. Oct. 15, 1942.

99.81 C16

Special reference is made to pulpwood operations in Ontario.

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. List of publications on the seasoning of wood. 21 pp., processed. Madison, Wis., June 1942. 1.9 F761Ls

### PRODUCTS UTILIZATION

AMENDMENT no. 2 to Conservation order M-208. South. Lumberman 46(10): 18-19. Oct. 1942. 99.81 S08

Issued on October 5 by War Production Board.

THE APPRAISAL of market values of merchantable timber. West Coast Lumberman 69(10): 26, 28-29. Oct. 1942. 99.81 W52

The Oregon and California Revested Lands Administration has organized and introduced a timber appraisal system founded on the value of the products which can be manufactured from the timber, less the cost of production.

BROKEN stocks of lumber can be turned into live merchandise. Canada Lumberman 62(20): 8-9, 31. Oct. 15, 1942. 99.81 C16

Illustrations show how an Iowa dealer has made profitable use of broken stock.

COWIE, DONALD. New Zealand timber now. Wood 7(8): 145-147. 99.82 W855

Developments in the utilization of local timbers.

FLORIDA introduces unique features in composite bridge construction.

Wood Preserv. News 20(9): 109-111, 116-117. Sept. 1942. 300.8 W853

Design and construction of laminated timber-concrete composite deck bridges.

GLEISINGER, EGON. Rediscovered wood. Nature Mag. 35(8): 401-405, 440.  
Oct. 1942. 409.6 N214

Forest products are capable of fulfilling five different technical functions: (1) supplying modern building materials, (2) providing paper and textile fibers, (3) giving fuel of high caloric value, (4) serving as food for humans, fodder for animals and alcohol for all uses, and (5) yielding byproducts from which chemical research is constantly developing new uses.

New forestry methods based on technical developments and sound economic reasoning, and practiced voluntarily, will probably be the answer to our conservation problem. Forests are slated to play an important role in the raw material economy of the future.

GOLF BALLS of wood pulp? Pacific Pulp and Paper Indus. 16(9): 17.  
Sept. 1942. 302.8 P11

Ethyl cellulose in the form of a soft plastic is now designed to replace rubber for many uses.

GRANT, JULIUS. The world cellulose problem; some recent technical advances in Sweden. Indus. Chem. and Chem. Mfr. 18(212): 324-329.  
Sept. 1942. Bibliography, p. 323. 382 In22

Political and industrial situations restricting trade agreements have led to a surplus of cellulose in many countries, particularly in Sweden. Swedish chemists are beginning to utilize cellulose to supplement the product for which there is the most urgent demand, cattle fodder. By suitable additions such as molasses, nitrogen, etc., and by preparatory processes, cellulose can be made into a fodder for the less discriminating ruminants.

GRONDAL, BROR L. Douglas fir cork. West Coast Lumberman 69(10): 20-24. Oct. 1942. 99.81 W52

Progress report on studies of cork production from Douglas fir being carried on in the laboratories of the College of Forestry of the University of Washington at the suggestion of the Washington State Planning Council.

HELMS, A. D. Australian newsprint; a visit to Boyer, Tasmania. Austral. Forestry 6(2): 67-72. 1942. 99.8 Aw74

Notes on the establishment of the newspaper industry in Australia. The first newsprint was passed through the Australian Newsprint Mills at Boyer, Tasmania, in March 1941.

HERRICK, GEORGE. Plywood for airplanes--its opportunity has arrived. Veneers and Plywood 36(10): 16-18. Oct. 1942. 99.82 V55

If plywood planes for war purposes prove to be highly successful, they will probably pave the way for small family plywood planes of tomorrow.

PLASTICS and wood 'planes; the new trend. Brit. Plastics 14(159): 159-160. Aug. 1942. 309.8 B76

Abundance of material, strength, durability, fire and corrosion resistance and other useful qualities account for the fact that plastic bonded plywood seems destined for an important place in aircraft materials.

PREFABRICATION. Wood 7(9): 155-157. Sept. 1942. 99.82 W855

Describes some American methods of prefabricating wooden buildings.

SHAW, T. E. How to select wooden fence posts. Purdue Agr. Ext. Ext. Bul. 283, 8 pp. Lafayette, 1942. 275.29 In2E

The size of the post, the percentage of heartwood, the rate of



growth, the kind of wood, and the soundness of wood structure are factors influencing durability in wooden fence posts.

SWEDISH timber and wood pulp industry. Paper Maker and Brit. Paper Trade Jour. 102(4): 174. Oct. 1941. 302.8 P1922

Heavy export decline shown as result of Skagerack blockade established in April, 1940.

TECHNICAL association of the pulp and paper industry. Technical association papers, 25th Ser., 836 pp. New York, June 1942. 302.9 T22

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. List of publications January 1 to June 30, 1942. 5 pp., processed. Madison, Wis., 1942. 1 F7692L

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. List of publications on pulp and paper. 31 pp., processed. Madison, Wis., Aug. 1942. 1.9 F761Lp

U. S. FOREST SERVICE. NORTHERN ROCKY MOUNTAIN FOREST AND RANGE EXPERIMENT STATION. Directory of wood-preserving plants and secondary wood-using industries in the northern Rocky mountain region. 16 pp., processed. Missoula, Mont., Aug. 1941. 1.9622 N3D62

U. S. NATIONAL BUREAU OF STANDARDS. Plywood (hardwood and eastern red cedar). Ed. 2, 25 pp. Washington, D. C., 1942. (CS35-42 Plywood) Bibliographical footnotes. 157.88 C73

Commercial standard CS35-42 supersedes CS35-31. Effective date for new production from July 15, 1942.

WAKEFIELD, W. E. Plywood in the construction of aeroplanes. Empire Forestry Jour. 21(1): 18-20. 1942. 99.8 Em72

Contribution from the Forest Products Laboratories, Dominion Forest Service, Lands, Parks and Forests Branch, Dept. of Mines and Resources, Ottawa.

WARD, C. A. Those raw materials; an introduction to the study of raw materials. 392 pp. London, George Allen & Unwin, Ltd., 1941. 280 W213

Bibliography. Wood and wood products, pp. 364-365.

The raw material with the most varied uses. Timber, wood pulp and paper, I-II, pp. 129-141; Wood, pp. 352-356.

WITHAM, G. S. Modern pulp and paper making; a practical treatise. Ed. 2, 705 pp. New York, Reinhold pub. corp., 1942. Bibliographical footnotes. 302 W77

Equipment and processes used in the manufacture of pulp and paper on this continent today.

WOOD TIRES move truck 20 miles per hour. South. Lumberman 46(10): 30. Oct. 1942. 99.81 So8

Tires standard in size, almost standard in shape and composed of five rings, glued, screwed and bolted together, with the outside rings of pine and the inside of oak.

#### WOOD AS FUEL

BELYEA, H. C. Fuelwood prices. Rural New Yorker 51(5539): 507. Oct. 3, 1942. 6 R88

Labor and transportation shortage are causing a depreciation in fuelwood prices by greatly reducing the supply for marketing.

WOODWARD, K. W., and KAUFFMAN, ERLE. Wood as a wartime fuel. Amer. Forests 48(10): 439-443, 477. Oct. 1942. 99.8 F762

Heating value of wood, use of wood for heating and cooking, history of past fuel usage, and harvesting of fuel wood. References are made throughout article to a survey made on the use of fuel wood in wartime by M. B. Dickerman of the Lake States Forest Experiment Station [U. S. Dept. Agr. Farmers' Bul. 1912].

#### WOOD PRESERVATION

AMERICAN WOOD-PRESERVERS' ASSOCIATION. Proceedings of the thirty-eighth annual meeting...January 27, 28 and 29, 1942. 610 pp. Minneapolis, 1942. 300.9 Am3

CHEMICAL paint protects wood from fire bombs. Pop. Sci. Monthly 141(5): 98-100. Nov. 1942. 470 P81

MISSOURI grade separation foundation on creosoted piles. Wood Preserv. News 20(9): 115-116. Sept. 1942. 300.8 W853

#### WOOD TECHNOLOGY

ARIES, ROBERT S., and KNUDSON, JOHN I. Utilization of wood and wood waste in the chemical industries. Amer. Lumberman no. 3241, pp. 26-29. Oct. 17, 1942. 99.81 Am3

Present utilization of wood extracts, cellulose, lignin, sugars and other extractives, and wood waste, and possibilities of greater future usage.

A table compiled by the U. S. Department of Agriculture (1939) lists trees, their products and the uses of the products.

BRAY, MARK W., and PAUL, BENSON H. Pulping studies on selected hybrid poplars. Paper Trade Jour. 115(16): 33-38. Oct. 15, 1942. Literature cited, p. 38. 302.8 P196

"Abstract. The physical properties and the chemical composition of the wood from several elevations in the trunks of 18 hybrid poplar clones representing 12 parentage classes have been determined at the Forest Products Laboratory. Clones of the same parentage class were grouped together for pulping tests. Comparison of yield and quality of sulphate pulps obtained from the several hybrid poplars with that from wood of *Populus tremuloides*, a natural poplar, is made. For further comparison of cooking methods, digestions were made on two of the parentage classes by the soda as well as by the sulphate process."

THE CHEMISTRY of cork; industrial research in Spain. Chem. Age [London] 47(1208): 192-193. Aug. 22, 1942. 38.2 C427

Abstract of the article by Professor I. Ribas of the University of Valencia, which appeared in the Spanish technical journal, Ion 2(6): 25-28, 1942.

CHRISTIAN, PAUL. The Vidal process; how it has opened new opportunities for plywood in scores of applications. Wood Prod. 47(9): 14-16, 18-19, 20. Sept. 1942. 99.82 W856

GOLDFINGER, G., and MARK, H. Alkaline purification of cellulose. Paper Trade Jour. 115(16): 27-29. Oct. 15, 1942. Literature cited, p. 29. 302.8 P196

"Abstract. Cotton linters and various types of wood cellulose were



treated with 17.5% NaOH solution for different lengths of time at 20 deg. C. Loss of weight ("nonalpha") and change in specific viscosity (average molecular weight) were measured."

KEITH, LAURENCE P. Timber structures. Civ. Engin. 12(10): 559-562. Oct. 1942. 290.8 C49

Among the reasons for the role timber is playing in the war program are reduction in the time required for construction, prefabrication, and removal of limitations on size. Forward steps in structural use of timber are glued laminated construction, composite timber-concrete construction and modern timber connector system of construction. References to **several publications on the subject are made throughout article.**

THE NEW age of wood. Fortune 26(4): 117-121, 180, 182-184, 186-188. Oct. 1942. 110 F772

The most abundant and the most wasted of our raw materials is the one with the widest range of uses. Wood, laminated, connected, compregnated, or otherwise processed, is replacing steel and aluminum. From cellulose, a wood extract, comes paper, fibers, and raw sugars yielding cattle fodder, yeast, and alcohol and from alcohol comes butadiene which is made into explosives. Lignin extract yields tars, lubricants, primers, road binders, fertilizers, rosin soaps, lignin plastics and vanillin. The two extracts together give us wallboards, and plastics. The oldest example of chemical conversion of wood is charcoal from the vapors of which acids and chemicals are manufactured.

SAMPLING and preparing wood for analysis. Paper Trade Jour. 115(13): 38. Sept. 24, 1942. 302.8 P196

Lists procedures which are applicable to the preparation of wood samples for all chemical tests other than for the determination of cellulose.

- U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. List of publications on mechanical properties and structural uses of wood and wood products. 30 pp., processed. Madison, Wis., July 1942. 1.9 F761Lme
- U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. List of publications on the growth, structure, and identification of wood. 38 pp., processed. Madison, Wis., Apr. 1942. 1.9 F761Lsta
- U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. Longitudinal shrinkage of wood. U. S. Forest Serv. Forest Prod. Lab. Tech. Note 234, 4 pp., processed. Madison, Wis., Apr. 1942. 1.9 F761

#### RANGE MANAGEMENT

REID, ELBERT H., and PICKFORD, G. D. An appraisal of range survey methods from the standpoint of effective range management. U. S. Forest Serv. Pacific Northwest Forest and Range Expt. Sta. Range Res. Rpt. 2, 66 pp., processed. Portland, Oreg., June 1942. Literature cited, p. 66. 1.9622 P2R16

Summarizes the results of a study made by the Pacific Northwest Forest and Range Experiment Station in cooperation with the Soil Conservation Service in 1939 to determine which of the combinations of range survey methods best fulfilled the requirements of a good survey as to dependability of forage estimates, reliability of forage type maps, and cost.

U. S. FOREST SERVICE. NORTHERN ROCKY MOUNTAIN FOREST AND RANGE EXPERIMENT STATION. Earlier marketing of range cows - is this a desirable range management practice? U. S. Forest Serv. North. Rocky Mountain Forest and Range Expt. Sta. Res. Note 26, 6 pp., processed. Missoula, Mont., Aug. 1942. 1.9622 N3R31

WILDLIFE

CALLENDER, R. E., GOODRUM, PHIL D., and TAYLOR, WALTER P. Wildlife and land use in wartime. Cattleman 29(5): 51, 54, 55, 56, 57, 58. Oct. 1942. 49 C29

A Texas study dealing with wildlife conservation, one of the factors in the successful conservation of basic natural production resources. Includes general and special recommendations.

TOMASEK, ANTON J. Pittman-Robertson aids conservation. Ill. Conserv. 7(3): 20-21. Fall 1942. 279.9 I16I1

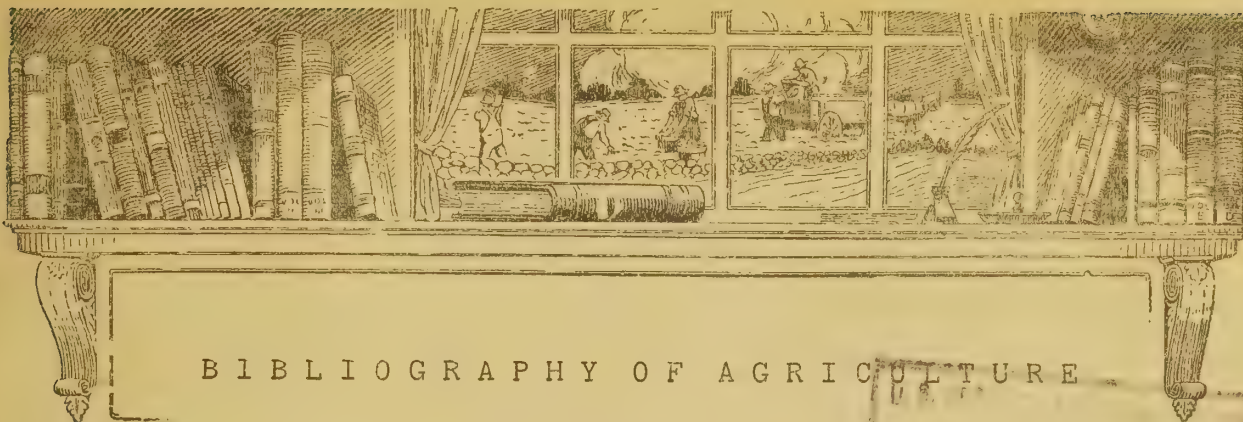
Cites projects developed in Illinois under the Pittman-Robertson program.

C O R R E C T I O N

The word, Switzerland, should be omitted from the first item on p. E-24 of the September issue of Section E, Forestry.



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Vol. 1

November 1942

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FORESTRY\*

Vol. 1

November 1942

No. 5

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Lands, parks and forests branch, pp. 63-115.
- DELAWARE. STATE FORESTRY COMMISSION. Annual report of the state forester,  
July 1, 1939 to June 30, 1940. 42 pp. Dover, 1940. 99.9 D37R
- GROBEN, W. ELLIS. Camouflage for Forest service structures. 4 pts.  
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Contents: Pt. I, Painting. 7 pp.; Pt. II, Screening and garnishing.  
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14 pp.; Pt. IV, Obscuration. 9 pp.
- LOS ANGELES COUNTY, CALIFORNIA. FORESTRY DEPT. Annual report, 1941-1942.  
58 pp., processed. Los Angeles, 1942. 99.9 L89
- McKELLAR, A. D. Ice damage to slash pine, longleaf pine, and loblolly  
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40(10): 794-797. Oct. 1942. 99.8 F768  
Damage done to longleaf, loblolly and slash pine plantations near  
Athens, Georgia, after a 1940 glaze storm. Variations occurred in  
amount of damage done, in degree of recovery and in final loss.  
Loblolly pine seemed least affected by the storm.
- RHODE ISLAND. DEPT. OF AGRICULTURE AND CONSERVATION. Seventh annual re-  
port, 1941. 113 pp. Providence, 1942. 2 R344  
Office of Forests and Parks, pp. 68-85; Forestry Section, pp. 73-85.
- TRINIDAD. FOREST DEPT. Administration report of the conservator of  
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- U. S. FOREST SERVICE. Nantahala national forest, North Carolina. [Map]  
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History of the growth of forestry in Wisconsin from the appointment

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\*References on forest entomology are included in Section C, Entomology;  
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### FOREST ADMINISTRATION AND POLICY

BRUNNER, M. H. What does the farmer want? Jour. Forestry 40(10): 772-777. Oct. 1942. 99.8 F768

The South Carolina Extension Service sent a questionnaire dealing with methods of approaching a farm forestry program for South Carolina to 250 farmers. Replies were returned from 67 of the group. The text of the questionnaire and a discussion of the responses are given. FOREST crop changes proposed; forest cutting control also asked by special state committee. Wis. Counties 5(4): 3. Oct. 1942.

Reduction of state benefits to some counties and lowering of the forest crop tax rate are proposed changes. THE FUTURE of Scottish forestry. Scot. Forestry Jour. 56: 7-24. Aug. 1942. 99.9 R81T

Address and notes on the discussion given at the Royal Scottish Forestry Society on Feb. 25, 1942, concerning the necessity of fitting estate forestry into a large land planning policy for the nation.

KURTH, E. L. The future of the piney woods. East Tex. 16(11): 10-11. Aug. 1942. 6 Ea73

Concerning regulation of small timber tracts in Texas, need for financial aid by the owners, and revision of the system of taxation. McKENZIE, MALCOLM A. The tree warden and the town forest. In Mass. State Col. Bur. Pub. Admin. Local Government in Massachusetts, pp. 59-61, processed. Amherst, Mass., Mar. 1941. 280.039 M381

Election and duties of the tree warden, and the economic usefulness of the town forest.

THE REPLACEMENT of woods felled during the war. Scot. Forestry Jour. 54(1): 4-22. Mar. 1940. 99.9 R81T

Private forestry in Scotland as regards management and prices received for woods products, and the need for future supervision and financial aid from the state, as reported at the meeting of the Royal Scottish Forestry Society held at Edinburgh, Feb. 21, 1940.

REYNOLDS, HARRIS A. The town forest in Massachusetts. In Mass. State Col. Bur. Pub. Admin. Local Government in Massachusetts, pp. 48-56, processed. Amherst, Mass., Mar. 1941. 280.039 M381

Excerpts from Bulletin no. 163, published by the Massachusetts Forest and Park Association, December 1939.

Purpose, organization, utilization and management of the town forests in Massachusetts, which cover an area of 31,702 acres and on which six million trees have been planted. A table shows the number of acres and trees planted in each town.

### FOREST FIRE PROTECTION

HISLOP, J. Improving fire-lines by the use of evergreen shrubs. Scot. Forestry Jour. 56: 39-42. Aug. 1942. 99.9 R81T

Suggests several species of evergreens useful for planting in fire breaks.



- U. S. EXTENSION SERVICE. Forest fire prevention and control. 1941. 14 pp., processed. [Washington, D. C., 1942]. 1.913 S2F76  
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### FOREST INFLUENCES

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 Presented at the Congress of the Forestry Association of Quebec at Saint-Anne, Sept. 24, 1942.  
 Role of the farm woods in economic life, in wildlife conservation, and in protection against soil erosion, the need for building up small wood-using industries, and of increasing the output of farm woodlands by better forest protection and management.
- YARHAM, E. R. War-time felling and climate. Trees 6(2): 46-50. Oct.-Nov.-Dec. 1942. 99.8 T714  
 The heavy felling in British woodlands is discussed in the light of its probable damaging effects on soil and water conservation and climatic changes.

### FOREST MANAGEMENT

- COLLINGWOOD, G. H. Science in the forest. Sci. Amer. 167(6): 270-273, illus. Dec. 1942. 470 Sci25  
 Scientific utilization of wood both in its natural form and as the basis for other products, and modern forestry practices, including planting, managed cuttings and adequate fire protection are means by which abundant supplies of this raw material can be guaranteed.
- DAVIS, D. H. S. Rodent damage in plantations and its prevention. So. African Forestry Assoc. Jour. no. 8, pp. 64-69. Apr. 1942. References. 99.9 So82  
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- DUNDAS, J. C. Notes on the regeneration of species on mossland on the Forth carse. Scot. Forestry Jour. 56: 33-39. Aug. 1942. 99.9 R81T  
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- GAUDETTE, GERARD. Le besoin du cultivateur de la Rive-Sud en bois de chauffage et en bois d'oeuvre. Bonne Terre 23(8): 204-207. Oct. 1942. 7 B64  
 Shows the advantages of cultivating wood-lots for obtaining fuel and service wood both for farm and commercial uses.
- HOLDSWORTH, ROBERT P. Town forests. In Mass. State Col. Bur. Pub. Admin. Local Government in Massachusetts, pp. 57-58, processed. Amherst, Mass., Mar. 1941. 280.039 M381  
 Shows the need for "planned, systematic, skilled management" of town forests.

HOW TO make your timber pay you bigger dividends. AT-FA (Amer. Turpentine Farmers Assoc. Coop.) 5(1): 6. Oct. 1942. 309.8 Am3

Prevention of forest fires and following selective thinning practices will insure profit in growing timber.

LAUGHTON, F. S. Notes on the silviculture of the indigenous forests. So. African Forestry Assoc. Jour. no. 8, pp. 24-36. Apr. 1942.

99.9 So82

General principles of management of indigenous forests based on the various types of locality, with emphasis on important factors such as soil moisture and soil-aeration.

NEW FORESTERS to help farmers grow, sell timber at fair price. Tenn. Conserv. 6(11): 3. Nov. 1942. 410 T252

Cooperative agreement reached between Tennessee State Division of Forestry and U. S. Forest Service whereby \$7,650 each will be given by the Federal and the State Government for the employment of five foresters to assist Tennessee farmers in managing their woodlands and marketing their timber.

OSSOWSKI, LEON. The collection and treatment of forest tree seeds. Scot. Forestry Jour. 56: 43-54. Aug. 1942. 99.9 R81T

Considers the choice of trees from which to collect seed, the time and methods of collecting, the treatment of collected seed, and testing of seed before sowing.

RIPLEY, P. O., ARMSTRONG, J. M., and KALBFLEISCH, W. Land clearing. Canada. Dept. Agr. Farmers' Bul. 111, 43 pp., illus. Ottawa, Oct. 1942. 7 C16F

Methods, machinery and cost for clearing lands of timber, bush, stump, and stone.

TURNBULL, JOHN M. A preliminary investigation into the causes of torsion in pine stems. So. African Forestry Assoc. Jour. no. 8, pp. 112-117. Apr. 1942. References. 99.9 So82

Suggests "that tortion is directly associated in some way - not necessarily silvicultural - with rate of growth."

U. S. FOREST SERVICE. SOUTHWESTERN FOREST AND RANGE EXPERIMENT STATION. The Fort Valley forest experiment station. 25 pp., processed. Tucson, Ariz., 1942. Publications, pp. 24-25. 1.9622 S3F77

Research activities deal mainly with ponderosa pine and are included broadly under the following topics: ecology of forest type; growth, reproduction and mortality; artificial reforestation; stand improvement; control of damage; sale and logging of timber; and management of woodland forests.

VIDAL, AUGUSTO R. PRETEL. Reforestación en la montaña. Agronomía [Lima, Peru], 6(24): 70-75. 1941. 9.8 Ag83

Economic and industrial benefits of reforestation in the jungle of Peru, including prevention of soil erosion. Short history of the planting of cinchonas.

WADSWORTH, FRANK H. Value of small-crowned ponderosa pines in reserve stands in the Southwest. Jour. Forestry 40(10): 767-771. Oct. 1942. Literature cited. 99.8 F768

Study made in 1941 in the Fort Valley Experimental Forest to determine the growth potentialities of ponderosa pine with small or abnormal crowns shows that the rate of growth of the pine is much more closely related to environment than to crown size or age.



WATSON, RUSSELL. Jack pine in Michigan. 47 pp., processed. Milwaukee, Wis., U. S. Forest service, North central region, Sept. 13, 1937. Bibliographical footnotes. 1.9 F7672J

Ch. I. Reproduction following fire, pp. 1-19. Undertaken as a preliminary, empirical investigation of the use of fire in causing reproduction of jack pine, using data obtained as a result of uncontrolled fires, of unknown intensity, burning in all kinds of jack pine stands.

Ch. III. Accelerated growth in residual stands, pp. 39-47. Preliminary growth data gathered in Michigan in areas cutover under commercial practice, using about 275 trees on 22 plots.

#### HARVEST CUTTINGS AND STAND IMPROVEMENTS

CARLTON, JOHN. Selective timber cutting produces revenue. Ala.

Conserv. 14(5): 10, 13. Nov. 1942. 279.8 A11

Besides realizing cash profits by selling timber after selective cutting rather than by lump sum price, tenant farmers have timber growing for future harvests of similar value.

IMPROVEMENT of forest trees in Sweden. Scot. Forestry Jour. 55(2): 72-74. Oct. 1941. 99.9 R81T

The estate of Ekebo, in Scania, is the center of the scientific and laboratory work to improve the growth and quality of forest trees through breeding, grafting and seed selection.

NIEDERHOF, C. H., and DUNFORD, E. G. The effect of openings in a young lodgepole pine forest on the storage and melting of snow. Jour. Forestry 40(10): 802-804. Oct. 1942. 99.8 F768

Results from a study conducted on the Fraser Experimental Forest 1940-1941 indicate that cuttings which provide for a maximum number of shaded and sheltered openings in young lodgepole pine stands should produce the best conditions for the storage and slow melting of snow. The study was a part of the research program in forest influences being carried on by the Rocky Mountain Forest and Range Experiment Station.

PEARSON, G. A. Improvement selection cutting in ponderosa pine.

Jour. Forestry 40(10): 753-766. Oct. 1942. Literature cited, p. 760. 99.8 F768

Describes a method of selective cutting practiced in the experimental forest at Fort Valley, near Flagstaff, Arizona, which leaves a larger growing stock than that remaining after many other methods of cutting and increases its effectiveness by eliminating low-grade trees, giving more room to subordinate trees, and improving the spacing in groups.

Comments on the article are followed by a reply from the author, pp. 760-766.

#### PLANTING

BERGH, T. K., and MOORE, L. T. Planting trees with a plow on north-western Minnesota farms. Conserv. Volunteer 4(22): 5-8. July 1942. 279.8 C765

The advantages and methods of plowing-in trees and shrubs in sandy soil as demonstrated by the Red River Valley forestry project in getting shelterbelts and windbreaks started.

CLEMENT, RAY. Boys and trees! growing together. Conserv. Volunteer 4(28): 15-20. Aug. 1942. 279.8 C765

About 60 Koochiching County, Minnesota, high school students planted 87,000 spruce and pine trees in a tree-planting program carried out on state-owned lands.

KING, W. L. Tree-planting for commercial purposes. So. African Forestry Assoc. Jour. no. 8, pp. 37-49. Apr. 1942. References, p. 49. 99.9 So82

Considers species of trees, annual precipitation, selection of site, marketing outlets, and operation costs as important factors in profitable tree-planting in South Africa. Tables give statistics on yields and values from a sample case of 1,600 acres planted in pine.

U. S. FOREST SERVICE. PACIFIC NORTHWEST FOREST EXPERIMENT STATION. Instructions for planting Douglas-fir on logged-off lands of western Oregon and Washington. 20 pp., processed. Portland, Oreg., Aug. 1942. 1.9622 P2In7  
Field handbook.

#### FOREST MEASUREMENTS

BRIEGLER, P. A. Progress in estimating trend of normality percentage in second-growth Douglas-fir. Jour. Forestry 40(10): 785-793. Oct. 1942. Literature cited. 99.8 F768

Studies show that failure to allow for change in the density of forest stands when computing growth estimates often leads to substantial errors. Stand age, distribution and present degree of density influence the trend in stocking. A simple method for making allowances in estimating growth of Douglas fir is shown.

GLADWIN, HAROLD S. Methods and instruments for use in measuring tree-rings. Medallion Paper no. 27, 13 pp. Globe, Ariz., Privately printed for Gila Pueblo, Feb. 1940. 463.36 G45

Ten plates illustrate the preparing and measuring of specimens.

GLADWIN, HAROLD S. Tree-ring analysis; methods of correlation. Medallion Paper no. 28, 63 pp. Globe, Ariz., Privately printed for Gila Pueblo, Dec. 1940. 463.36 G45T

Presents tables illustrating departures from various averages, preceded by introductory statements describing the evolution of the experiments.

HALLIN, WILLIAM. Volume and taper tables for old-growth coastal redwood. 79 pp., processed. Berkeley, U. S. Forest service, California forest and range experiment station, Mar. 10, 1941. 1.9622 C2V88

Prepared to meet the different standards of utilization for timber cruising and appraisal, and forest management investigation of old-growth redwood (*Sequoia sempervirens*) in the coastal region.

HORNIBROOK, E. M. Yield of cutover stands of Engelmann spruce. Jour. Forestry 40(10): 778-781. Oct. 1942. Literature cited. 99.8 F768

Study was made in 1940 on selectively cut stands of Engelmann spruce in Colorado to obtain more complete data on growth and yield values. An equation for estimating future yield is presented in



alignment chart form along with a table of mean annual gross increment for cutover Engelman spruce stands, and a table giving correction factors to improve estimates of yield.

McCULLOCH, W. F. Utilization of second growth Douglas fir. West Coast Lumberman 69(11): 26. Nov. 1942. 99.81 W52

Table shows the relative yield of second growth Douglas fir stands of different ages.

WILSON, S. E. Measuring round timber. Scot. Forestry Jour. 55(2): 64-71. Oct. 1941. 99.9 R81T

Explanation, short history and relation to modern methods of the Hoppus system for measuring log timber.

### FOREST RECREATION

KETTLE Moraine progress report. Wis. Counties 5(4): 8, 21. Oct. 1942.

On the acquisition and development of lands for the Kettle Moraine state recreational forest.

### FOREST RESOURCES

BLACKMON, G. H. The tung-oil tree in Florida. Fla. Dept. Agr. State Mktg. Bur. For Sale, Want and Exchange Bul. 2(3): 1, 6. Nov. 2, 1942.

Description and cultivation of the tung tree (*Aleurites fordii* Hemsl.) and manufacture and utilization of tung oil.

FOREST production must be upped; estimates place nation's wartime lumber needs at 39 billion board feet. Ala. Conserv. 14(5): 9. Nov. 1942. 279.8 All

Production of about two billion board feet is goal set for Alabama. Transportation and labor problems along with results of years of destructive forest practices creating a scarcity in some woods in grades and sizes needed are hindering factors in achieving requirements.

GAINWAY, J. C. Our timber "goes to war." Conserv. Volunteer 4(22): 22-24. July 1942. 279.8 C765

The timber production of Minnesota, both from state- and privately-owned lands, will be doubled in 1942 for paper mill products and for direct war uses. Careful, selective cutting methods are to be used so that no permanent depletion will be caused.

KINNARD, VIRGINIA. Balsa - Ecuador's contribution to war effort. U. S. Dept. Com. Foreign Com. Weekly 9(7): 5, 17. Nov. 14, 1942. 157.54 F763

Environment, growth, and utilization.

LINDEMAN, KARL S. Forest resources of Huron county, Ohio. Ohio Forest Survey Rpt. 19, 59 pp., processed. Sept. 1942. 99.9 Un32

Information on the amount, condition, location, and market outlets of the existing forest resources of Huron County, Ohio.

METCALF, WOODERIDGE. California seeks million cork oak trees. West Coast Lumberman 69(11): 36. Nov. 1942. 99.81 W52

Shows efforts being made by different agencies to plant, and grow enough trees in California to yield a significant volume of cork.

## LUMBERING

- CHALLENGER, J. W. Five years of power sawing. Timberman 44(1): 10-13. Nov. 1942. 99.81 T484  
From the introduction of a German-made Stihl power chain saw in Bloedel, Stewart & Welch, Ltd., Port Alberni, B. C., in 1937, to the present designing of a one-man, light weight power falling machine.
- ELECTRIC powered log transfer system; Schafer bros. logging co. perfects new method of transferring entire truck load of logs to rail cars. West Coast Lumberman 69(11): 14-15, 72, illus. Nov. 1942. 99.81 W52
- HORNADAY, MARY. Women in the woods. Amer. Forests 48(11): 496-498, 527. Nov. 1942. 99.8 F762  
Critical manpower shortage has led to the employment of scores of women in the sawmills and logging camps of the Northwest. In many jobs such as the tying and sorting of lumber, women are proving to be quicker and more accurate than men.
- KOROLEFF, A. Manpower and efficiency in woods operations. Pulp and Paper Mag. Canada 43(11): 830-832. Oct. 1942. 302.8 P96  
Points out need for instruction and recreation in logging camps in order to have a full and efficient use of manpower. Lists some publications on the subject.
- KOROLEFF, A. Woodcutter's handbook; how to cut more pulpwood safely without greater effort. Ed. 2, 24 pp. Montreal, Woodlands section, Canadian pulp and paper assoc., 1942. 99.76 K84W  
Planned to give most benefit to inexperienced workers, but useful in teaching good cutters how to work better, earn more, and become less tired.
- LODEWICK, J. ELTON. Douglas fir log values. Pts. I-III. Timberman 43(11): 18, 20, 24; (12): 18-20; 44(1): 26, 28, 30, 32. Sept., Oct., Nov. 1942. 99.81 T484  
"A more complete report by the same author explaining the procedures as well as the results has been published by the Pacific Northwest Forest and Range Experiment Station, Portland, Oregon, as Products Paper No. 3, 'West Coast Log Values: 1. Douglas fir from the Oregon Cascades.'" Dec. 1, 1941. 1.9622 P2P942
- LOGGING company designs pre-cut house. West Coast Lumberman 69(11): 24-25, 78. Nov. 1942. 99.81 W52  
"Spaulding unit" is pre-cut and designed at the mill. It offers advantages of using a minimum of critical materials, labor, time in construction and costs, and affords warmer and more livable quarters.
- LUMBER in a jam. Business Week no. 687, pp. 36-37. Oct. 31, 1942. 280.8 Sy8  
Impending 6,000,000,000 b. ft. shortage in lumber is causing new emphasis to be placed on full utilization of small, portable sawmills.
- NEW SEARCH-UREA method of lumber seasoning. West Coast Lumberman 69(11): 36. Nov. 1942. 99.81 W52  
Major results of testing by the Ammonia Department of the E. I. duPont of Nemours & Co.



SCOTT, M. H. Timber seasoning in South Africa. So. African Forestry Assoc. Jour. no. 8, pp. 70-102. Apr. 1942. References, pp. 101-102. 99.9 S082

Fundamental principles involved in the drying of timber with references to moisture content, shrinkage and structure of the timber considering effects of season, weather and dimensions. Advantages of kiln drying are pointed out with information on construction, equipment and control of types of kilns in present use. Concludes with information on the seasoning properties of the more common South African exotic and indigenous timbers.

TELFORD, C. J. Small sawmills - to keep 'em rolling. U. S. Forest Serv. Forest Prod. Lab. R1400, 36 pp., processed. Washington, D. C., June 1942. 1.9 F761R

Places emphasis on methods of maximum production with minimum equipment and applies primarily to the moving or rebuilding of small sawmills rather than to the installation of new equipment. Does not deal extensively with market outlets.

WHAT is seasoned timber? N. S. Wales Forestry Comm. Pam. 7, 7 pp. Sydney, 1941. 99.9 N47P

Contains tables showing moisture equilibrium for timber in centers of New South Wales, and for different values of relative humidity and temperature.

#### PRODUCTS UTILIZATION

BARKER, MAURICE E. Making activated charcoal for gas masks. Chem. & Metall. Engin. 49(9): 215-216. Sept. 1942. 381 E12

CARLE, A. B. Plywood manufacturing methods. Veneers and Plywood 36(11): 6-7. Nov. 1942. 99.82 V55

CASCIANI, FERRI, and STORIN, GORDON K. The pH factor in the hypochlorite bleaching of wood pulp. Pt. 1 - Single-stage treatment of sulphite pulp. Paper Trade Jour. 115(20): 33-40. Nov. 12, 1942. Literature cited. 302.8 P196

"The work consists of three main parts: (1) A study of the effect of bleaching with calcium hypochlorite alone using varying amounts of available chlorine on the final pH and on certain properties of the pulp. (2) An investigation into the use of three alkalies - caustic soda, sodium metasilicate, and hydrated lime - under two sets of conditions (a) in bleaching to an 81 brightness at a final pH of 6.7, and (b) in bleaching to a 74 brightness at a final pH of 7.25. (3) A study of the effect of bleaching with calcium hypochlorite to a constant brightness at varying final pH values on chlorine requirements, bleaching time, and on certain pulp properties."

CHARCOAL for gas producer plants, by the conservator of forests in consultation with the Technical sub-committee on producer gas plants. Rhodesia Agr. Jour. 39(5): 334-340, illus. Sept.-Oct. 1942. References. 24 R34

Characteristics of good charcoal, local timbers suitable for making charcoal, factors affecting yield and quality of charcoal, and brick kilns designed by the Fuel Research Institute of South Africa.

**CHEMICAL AND METALLURGICAL ENGINEERING.** Materials for the construction of chemical engineering equipment. Chem. & Metall. Engin. 49(9): 85-128. Sept. 1942. 381 E12

Physical properties of principal plastics used as engineering materials, p. 100; Wood for chemical equipment, p. 104.

**HANSEN, HOWARD J.** Trained timber designers needed. Civ. Engin. 12(11): 607-610, illus. Nov. 1942. 290.8 C49

Points out many of the important developments in wood technology such as use of timber connectors, glued, laminated construction and unit working stresses, and urges intensified, scientific training in the uses of wood. Contains references on the subject in the article.

**HOW TO produce aircraft lumber.** West Coast Lumberman 69(11): 10-13, 54, 58, illus. Nov. 1942. 99.81 W52

Detailed discussion of various points entering into the production of "aero," such as starting the cut, inspecting grading, improving methods and important defects in wood.

**KICKLER, D. C.** Material waste and the war. Furniture Mfr. 59(10): 6-7, 24-25. Oct. 1942. 300.8 F982

Manufacturing companies waste lumber by piling it improperly in the lumber yard where it becomes crooked, twisted and checked, by buying panel stock to a larger specification than is necessary, and by cutting individual pieces too large. Glue abrasives, nails, and other small items wasted amount to a large total.

**KUHNE, NORMAN.** Holiday harvest. U. S. Agr. Mktg. Admin. Mktg. Activ. 5(10): 11-13. Oct. 1942. 1.942 A8M34

Marketing Christmas trees.

**LUMBER salvage campaign; saves lumber, curtails waste, creates business.** Amer. Lumberman no. 3242, pp. 23-25, 27. Oct. 31, 1942. 99.81 Am3

American Lumberman proposes a campaign to salvage lumber from war industries, war housing projects, and old buildings and houses.

**MELSON, ROBERT R.** Military ration container problems. Paper Trade Jour. 115(18): 36-39. Oct. 29, 1942. 302.8 P196

Presented at the Fall Meeting of the Technical Association of the Pulp and Paper Industry, Boston, Mass., Sept. 29-Oct. 1, 1942.

High humidity, high temperature, insect and rat infestations, long storage periods, and other problems have to be considered in designing containers for packaging supplies for military usage.

**OLZENDAM, RODERICK.** After the war - wood. South. Lumberman 165(2078): 47-49. Nov. 1, 1942. 99.81 Ss82

Presents a vision of tomorrow of the variety of uses of wood.

**PERKINS, ROBERT C.** Characteristics of woods for aircraft structural plywoods. Aero Digest 41(4): 181-182, 185-186, 189-190, illus. Oct. 1942. 333.8 Ae82

Covers wood facts needed by aircraft engineers such as physical properties of aircraft woods, ratios of strength to weight, gluing information and availability of the several species.

**SCARFED joints in plywood - permit making large sheets for aircraft and marine use.** Wood Prod. 47(8): 33-34, 36; (9): 33-34. Aug., Sept. 1942. 99.82 W856

Practices in scarf jointing including cutting, bonding, testing and other phases.



SMITH, J. M. "Duration" manhole design uses wood cover and concrete ring. Engin. News-Rec. 129(15): 91. Oct. 8, 1942. 290.8 En34

Design of wood manhole cover eliminating need for about 10 tons of iron at cost of approximately three quarters of that of the standard cast iron ring and cover.

TAYLOR, A. J. Grading and sampling of wattle bark. So. African Forestry Assoc. Jour. no. 8, pp. 103-111. Apr. 1942. References. 99.9 So82

Besides tannin content, other characteristics such as color, thickness, and freedom from moldiness enter into the grading and sampling of wattle bark. Shows methods of analysis and variations in sampling.

U. S. FOREST SERVICE. Dogwood needed for mill shuttles. 1 p., processed. Washington, D. C., 1942. 1.9622 A2D67

U. S. Department of Agriculture, Forest Service and Extension Service cooperating.

U. S. TARIFF COMMISSION. The foreign trade of Latin America; a report on the trade of Latin America with special reference to trade with the United States. Pt. III. Selected Latin American export commodities. (Revised) U. S. Tariff Comm. Rpt. 146, ser. 2, 253 pp. Washington, D. C., 1942. 173 T17Rs  
Woods, pp. 227-235.

UPSON, ARTHUR. Lumber production falling behind requirements. West Coast Lumberman 69(11): 30, 32, 53. Nov. 1942. 99.81 W52

Presented before the National Hardwood Association showing the activities of the Lumber Products Branch of the War Production Board, and the present status of forest products requirements.

WHITE, CHARLES H. Using home-grown timber for farm buildings. Minn. Univ. Agr. Ext. Bul. 238, 16 pp. University Farm, St. Paul, June 1942. 275.27 M66S

Shows that the farm woodlot can furnish much of the necessary raw material for improving farm buildings. Gives suggestions for the use of hardwoods in improving barns, sheds and houses.

WOOD at war. Business Week no. 687, pp. 38-40. Oct. 31, 1942. 280.8 Sy8

Paper base plastic, wood plastic, "impreg" and "compreg" processes, plasticized wood, and speed-up in seasoning are ways by which the Forest Products Laboratory plans to stretch the utility of available wood.

WOODEN springs have reached the production stage. Furniture Mfr. 57(11): 19-20. Nov. 1942. 300.8 F982

#### WOOD PRESERVATION

CREOSOTED-timber culverts on the Alaska highway. Roads and Bridges 80(10): 44, 114, 116. Oct. 1942. 290.8 C16A

Majority of culverts used are of Canadian manufacture.

GUAY, JEAN J. Préservation du bois. Forêt Québécoise 4(9): 457-458. Nov. 1942. 99.8 F79

Describes a wood preservative which has greater toxicity and endurance than creosote, and has other advantages not found in creosote without offering any of its dangers.

HAS NEW chemical fire retardant. Canada Lumberman 62(21): 26.

Nov. 1, 1942. 99.81 C16

Chemical demonstrated at Harvard University Mallinckrodt Laboratories is not fireproof but is designed to prevent spread of fire.

### WOOD-USING INDUSTRIES

CAMPAGNA, ELZEAR. Les petites industries du bois. Bonne Terre

23(8): 196-203. Oct. 1942. 7 B64

Presented at the Congress of the Forestry Association of Quebec at Saint-Anne, Sept. 24, 1942.

Points out the advantages of small wood-using industries, lists types of such industries, and recommends the establishment of a local school for the training of men in their operation.

CLARK, FREDERICK C. The U. S. pulp and paper industry in the national defence programme. Soc. Chem. Indus. Jour. Chem. and Indus.

61(44): 441-442. Oct. 31, 1942. 382 M31C

Presents a brief review of demands upon the United States pulp and paper industry, 1917-1918, and an outline of present requirements.

DAVIES, A. CATHERINE. The role of the technical librarian in the paper industry. Paper Trade Jour. 115(18): 32-36. Oct. 29, 1942.

References. 302.8 P196

Presented at the Fall Meeting of the Technical Association of the Pulp and Paper Industry, Boston, Mass., Sept. 29-Oct. 1, 1942.

Describes the functions of the technical library and the fields from which technical information is drawn.

EDWARDS, LUCILLE B. The naval stores, or turpentine industry of New Hanover county, North Carolina. Naval Stores Rev. 52(32):

12, 14. Nov. 7, 1942. 99.81 N22

Describes the growth of the industry from 1870 to 1880 when North Carolina reached its maximum naval stores production, and its decline due to the destructive method of extracting the raw gum, forest fires and the depredations caused by razor back hogs.

HAYWARD, RALPH A. Opportunities and services of the paper industry.

Paper Trade Jour. 115(18): 29-31. Oct. 29, 1942. 302.8 P196

Presented at the Fall Meeting of the Technical Association of the Pulp and Paper Industry, Boston, Mass., Sept. 29-Oct. 1, 1942.

Considers the problems to be met in a curtailment program.

INCREASED forest production called for in war program. AT-2A (Amer.

Turpentine Farmers Assoc. Coop.) 5(1): 10. Oct. 1942. 309.8 Am3

NEUBRECH, W. LEROY. Current trends in the pulp and paper industry; adjustments to fit it to war economy indicated. U. S. Dept. Com.

Dom. Com. 30(16): 15-18. Oct. 15, 1942. 157.54 D713

Includes a chart showing production, stocks, and apparent consumption of wood pulp for 1940, 1941 and the first 7 months of 1942.

SMITH, W. M., JR. American tung oil. Chem. & Metall. Engin. 49(9):

212-213. Sept. 1942. 381 E12

The tung oil industry in America and the increasing importance of the tung tree products for their medicinal and chemical properties.

SWEARINGEN, LYNN. The American tung industry comes of age. U. S. Dept. Com. Dom. Com. 29(24): 3-7, 11. June 11, 1942. 157.54 D713

The South's new tung oil industry, which has a production estimated at 10,000,000 pounds for 1942, owes its existence partly to



the war which cut off the China supply and partly to interest in the trees already growing in the southern tung belt. Mississippi has three-fourths of the total of 12,671,344 trees in the United States. The discussion covers the utilization of the oil, growing of the tree, and the drying and milling of the seed.

U. S. TARIFF COMMISSION. Report to the United States Senate on red-cedar shingles. U. S. Tariff Comm. Rpt. 149, ser. 2, 140 pp., illus. Washington, D. C., 1942. 173 T17Rs

Report of an investigation made in response to Senate Resolution 79 of the Seventy-seventh Congress, first session, on the effect of importations of red-cedar shingles from Canada upon the red-cedar-shingle industry in the United States.

#### RANGE MANAGEMENT

BISWELL, H. H., and FOSTER, J. E. Possibilities of forest grazing; results of survey made on 100 cattle producing farms. Cattenan 29(6): 89. Nov. 1942. 49 C29

Advantages and problems of beef cattle grazing in the Coastal Plain counties in North Carolina observed from November 1940 to March 1941.

CAMFIELD, R. H. Sampling ranges by the line interception method. U. S. Forest Serv. Southwest. Forest and Range Expt. Sta. Res. Rpt. 4, 28 pp., processed. Tucson, Ariz., June 1942. 1.9622 S3R31

A description of the line interception method and procedure followed in testing data obtained by sampling density and composition of range vegetation in numerous small experimental plots, several experimental range pastures, and two large national forest allotments.

#### WILDLIFE

RYAN, J. C. Fire damage to wildlife. Conserv. Volunteer 4(22): 17. July 1942. 279.8 C765

Forest fires damage wildlife including fish.

Abbreviations used in this publication are those listed in U. S. Department of Agriculture Miscellaneous Publication 337, Abbreviations Used in the Department of Agriculture for Titles of Publications. April 1939.

Call numbers following the citations are those of the U. S. Department of Agriculture Library unless otherwise noted.

The Department can supply only its own publications; other items cited may ordinarily be obtained from their respective publishers. Many of them are available for consultation in public or other libraries.

Photoprint or microfilm copies of any publication listed may be obtained from the Library. Order blanks giving prices and method of payment will be sent on request.



## BIBLIOGRAPHY OF AGRICULTURE

SECTION E  
FORESTRY\*

Vol. 1

December 1942

No. 6

GENERAL FORESTRY

ARKANSAS. FORESTRY COMMISSION. Eighth annual report, 1940/1941.  
28 pp., illus., map, tables. Little Rock, 1941. 99.9 Ar4

Represents the State sponsored program for forest conservation.

AUSTRALIA. COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH. DIV. OF  
FOREST PRODUCTS. Annual report, 1941-42. 17 pp., processed.  
Melbourne, 1942. 99.9 Au722R

AVAKIAN, ANNE M. Staff publications, California forest and range  
experiment station, 1916-1941. 37 pp., processed. Berkeley,  
Calif., 1942. 1.9622 C2St1

Author list giving publications in chronological order followed  
by a list of Station publications. List supersedes one issued in  
1937.

JACOBS, WILLIAM F. Evaluating a boy scout forestry project. Jour.  
Forestry 40(11): 841-844. Nov. 1942. 99.8 F768

Scope, organization, anticipated benefits and results of the  
Florida Boy Scout Forests Project organized in 1932.

LITTÉRATURE forestière. Intersylva 2(1): 83-121. Jan. 1942.  
99.9 In87

Annotated review of forestry publications received at the Centre  
International de Sylviculture during the period July 1 - Aug. 30,  
1940, which present an international or scientific viewpoint.  
References are listed under sixteen main headings: 1. Pédologie  
forestière (Forest soil science); 2. Météorologie forestière;  
3. Botanique forestière; 4. Zoologie forestière; 5. Sylviculture;  
6. Aménagement et production; 7. Protection générale de la forêt;  
8. Exploitation et transport des produits forestiers; 9. Propriétés  
et utilisation technique des produits forestiers; 10. Restauration  
des terrains en montagne et génie forestier; 11. Afforestation des  
terrains incultes; 12. Politique de la forêt, du bois et des produits  
forestiers; 13. Gestion et estimation forestières (Forest administra-  
tion and estimation); 14. Marché du bois et des produits forestiers  
(Market for lumber and other forest products); 15. Importance  
culturelle de la forêt; 16. Questions diverses.

NORTH CAROLINA. DEPT. OF CONSERVATION AND DEVELOPMENT. Eighth biennial  
report. 1938-1940. 157 pp., illus. [Raleigh, N. C.] 1940.  
279.9 N81

Division of Forestry, pp. 40-97.

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\*References on forest entomology are included in Section C, Entomology;  
references on forest botany in Section D, Plant Science.

- OLSON, JAMES C. J. Sterling Morton. 451 pp., illus. Lincoln, Univ. of Nebraska press, 1942. Bibliography, pp. 431-437. 120 M84  
Full length biography of the founder of Arbor Day telling not only of his work in the reforestation of the treeless, western plains but also of his work as a writer, speaker and political leader.
- SOUTH AUSTRALIA. WOODS AND FORESTS DEPT. Annual report, 1940-1941. 12 pp. Adelaide, 1942. 99.9 So8R  
Decided increase shown in production of forestry products, in number of personnel employed, and in other forestry operations.
- U. S. FOREST SERVICE. Kaibab national forest, Arizona. Gila and Salt river meridian. [Map] [Washington, D. C.] 1942. 1 F765Ma
- U. S. FOREST SERVICE. Ochoco national forest, Oregon. Willamette meridian. [Map] [Washington, D. C.] 1942. 1 F765Ma
- U. S. FOREST SERVICE. Siskiyou national forest, Oregon and California. Willamette and Humboldt - Mt. Diablo meridians. [Map] [Washington, D. C.] 1942. 1 F765Ma
- VERMONT. AGRICULTURAL EXPERIMENT STATION. Fifty-fifth annual report, 1941-1942. Vt. Agr. Expt. Sta. Bul. 495, 37 pp. Burlington, Sept. 1942. 100 V59  
Forestry, pp. 25-27.
- WIRT, GEORGE H. Joseph Trimble Rothrock. Pa. Dept. Forests and Waters. Serv. Letter 13(3): 39-44. May-June 1942. 99.9 P38S  
Biographical sketch of the father of forestry in Pennsylvania.

#### FOREST ADMINISTRATION AND POLICY

- FORSLING, CLARENCE L. Conservation of the forest resources of the Americas. Amer. Sci. Cong., 8th, Washington, 1940. Proc. 5: 95-102. 1942. 330.9 Am3008  
Presents the history and results of three centuries of exploitation and settlement in American forest lands, and points out that the relatively undepleted resources of the tropical American forests will probably be utilized to a greater extent now than formerly. Outlines steps in forest policy pertaining to land-use planning, public and private ownership, education, utilization, management, increased market outlets, and trained forestry personnel.
- MISSISSIPPI'S forests and the future. Miss. Forests and Parks 7(11): 3-4. Nov. 1942. 99.8 M694  
Ownership and management of Mississippi's approximate 16 million acres of forest land with recommendations for measures in acquisition, education, management, ownership and other practices to improve the forestry situation so that the present overcutting for war purposes will not seriously deplete future resources.
- NELSON, ALF Z. The concept of "productive capacity" in relation to forest properties. Amer. Soc. Farm Managers and Rural Appraisers. Jour. 6(2): 106-108. Oct. 1942. 281.8 Am32  
"Productive capacity" is only one of the factors affecting the amount of net income expected from forest property and should not be used in an economic sense to mean the basic criterion in forest valuation.



PETITMERLET, MARIUS. Quelques considérations sur la législation forestière en Suisse. Intersylva 2(1): 23-29. Jan. 1942. Bibliographical footnotes. 99.9 In87

Historical outline of forestry regulations and codes in Switzerland followed by a discussion of legislation discriminating between protective and non-protective forests and the conservation of the wooded area.

Summaries in German, English, Spanish and Italian.

REIF, A. E. Kettle Moraine state forest. Wis. Conserv. Bul. 7(11): 7-9. Nov. 1942. 279.8 W752

The State policy for acquiring forest lands, the areas for initial acquisition, and the recreational developments that have been made.

STAUTER, J. M. Farm bureau seeks forestry help; passage of amendment upping federal appropriation urged by leaders. Ala. Conserv. 14(5): 5. Dec. 1942. 279.8 All

Concerning the Clarke-McMurry amendment, S. 2629, 77th Congress, 2d session, providing additional federal funds for protecting State forest resources.

STEIJN, J. A. van. L'économie forestière et l'approvisionnement en bois des Pays-Bas. Intersylva 2(1): 29-38, illus. Jan. 1942. 99.9 In37

Government control over forestry and forest management in the Netherlands and a study of production, afforestation and conservation of the forests.

Summaries in German, English, Spanish and Italian.

STEIJN, J. A. van. Quelques données sur les conditions forestières des Pays-Bas. (concluded) Jour. Forest. Suisse 93(8/9): 186-188. Aug./Sept. 1942. 99.8 J82

Forest conditions in the Netherlands.

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### FOREST FIRE PROTECTION

JEMISON, GEORGE M. The place of fire protection in forest education. Jour. Forestry 40(11): 834-836. Nov. 1942. Bibliographical footnotes. 99.8 F768

The small amount of time, 3 to 4 per cent, generally allotted to fire protection instruction in forestry schools is not in ratio to the 35 per cent of working time spent by the professional forester in fire protection and control, or to the approximate \$25,000,000 spent by federal agencies yearly in this work.

NEW YORK UNIVERSITY. CENTER FOR SAFETY EDUCATION. Fire prevention education. 355 pp., illus. New York, National board of fire underwriters, 1942. 296.6 N48

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#### FOREST MANAGEMENT

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- AUBERT, SAM. A propos des terres arides et de leur boisement. Jour. Forest. Suisse 93(10): 207-209. Oct. 1942. 99.8 J82  
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- DIEBOLD, C. H. Effect of fire and logging upon the depth of the forest floor in the Adirondack region. Soil Sci. Soc. Amer. Proc. (1941) 6: 409-413, illus. Literature cited. 56.9 So3  
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- DIETERICH, VIKTOR. Les buts des recherches et de l'enseignement de l'économie de l'exploitation forestière (Forstliche betriebswirtschaftslehre) Intersylva 2(1): 38-59, illus. Jan. 1942. Bibliographical footnotes. 99.9 In87



A discussion of the research aims and theory of the science of forest management with its basic principles illustrated in detail by a number of examples.

Summaries in German, English, Spanish and Italian.

DONEHOWER, WESTON, and SACCO, D. J. Christman tree farming. U. S. Soil Conserv. Serv., Soil Conserv. 8(6): 134, 136, 142. Dec. 1942. 1.6 So3S

Successful Christman tree industry on land formerly eroded and deteriorated located on a 900-acre farm in Columbia County, Pennsylvania.

DOWNS, ALBERT A. Early responses to weedings in some eastern mountain hardwoods. Jour. Forestry 40(11): 865-872, tables. Nov. 1942. Literature cited. 99.8 F768

Study to determine the types of trees that will or will not benefit from weeding, and the degree of release necessary. Crown class and vigor are shown to be useful criteria in determining the response to weeding.

L'ÉCONOMIE forestière et la question du bois dans l'année de guerre 1942. Jour. Forest. Suisse 93(8/9): 170-176. Aug./Sept. 1942. 99.8 J82

Reports on forest management in Switzerland in 1942 showing the increased use of native woods to replace those formerly imported, and the effect of the shortage of trained foresters and other wood laborers.

ESPAILLAT, RAFAEL A. Defensa de los bosques y conservación del suelo. Amer. Sci. Cong., 8th, Washington, 1940. Proc. 5:67-78, pl. 1942. 330.9 Am3008

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GRAEBER, R. W. Four steps in the management of farm woods. N. C. Agr. Col. Ext. Cir. 260, 8 pp., illus. Raleigh, Aug. 1942. 275.29 W811

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GRØN, A. HOWARD. Le reboisement des landes dans le Jutland. Intersylva 2(1): 11-22, illus., maps. Jan. 1942. Bibliographical footnotes. 99.9 In87

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LAVOIE, LAURÉAT. Traitement et orientation à donner dans le cadre de l'économie régionale, aux forêts de la rive sud, depuis Montmagny jusqu'au Témiscouata. Forêt Québécoise 4(10): 502-509. Dec. 1942. 99.8 F79

Policy of regional economy in the forests to the south of the St. Lawrence River stretching from Montmagny to Témiscouata.

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- MANNING, D. E. B. Some aspects of the problem of taungyas in Burma. Indian Forester 67(10): 502-505. Oct. 1941. 99.8 In2  
A new method of hill cultivation that will bring about improvements in the land and in the crops planted is badly needed in Burma. Both agricultural and forest management are needed to settle the problem.
- MIRCHANDANI, T. K. Treatment of teak plantations. Indian Forester 67(8): 399-402. Aug. 1941. 99.8 In2  
Shows the difficulty of growing teak in a mixed forest since it is a strong light demander and is not tolerant of crown friction. Suggests a means of gradually converting the pure teak plantation into mixed woods.
- NEW JERSEY. STATE SOIL CONSERVATION COMMITTEE. Trees and shrubs as soil savers. N. J. State Soil Conserv. Com. Bul. 4, 9 pp., tables. New Brunswick, Feb. 1939. 56.9 N46  
Why, what and where to plant windbreaks of trees and shrubs to control water and wind erosion, particularly as applies to New Jersey farms.
- OPSAHL, WALDEMAR. L'économie forestière et du bois en Norvège. Intersylva 2(1): 59-73, illus., map. Jan. 1942. 99.9 In87  
Includes a short history of wood export trade and of wood-using industries in Norway, and a study of its forest resources, forest management policies and the relation between annual increment and yield.
- SOTHERS, D. B. Riverain forests in Sind, 1936-41. Indian Forester 67(12): 637-642. Dec. 1941. 99.8 In2  
Condition of the forest lands in Sind that are directly accessible to river floods, with information on the progress being made in controlling soil erosion and in regenerating the forests.
- U. S. SOIL CONSERVATION SERVICE. REGION 9. The forestry phase of farm planning; a handbook. 97 pp., illus., processed, 53 tables. Spokane, Washington, Rev. Jan. 1942. 1.96 Op2F  
Prepared for the use of planning technicians "in analyzing the common woodland needs and conditions of the farm, and in prescribing the practices that are essential to improve the woodlands and to control erosion by means of woody planting."
- ZON, RAPHAEL, and DUERR, WILLIAM A. Farm forestry in the lake states; an economic problem. U. S. Dept. Agr. Cir. 661, 34 pp., maps, tables. Washington, Nov. 1942. 1 Ag84C  
An appraisal of the farm forestry situation in the important rural sections of the Lake States, analyzing the economic factors that are responsible for the present condition, and illustrating with case studies of eight typical localities in the principal producing units of the region. Recommends a program of remedial measures to make the woodlands more productive.



FOREST MEASUREMENTS

AUGHANBAUGH, J. E. Chestnut oak taper table. Pa. Dept. Forests and Water. Serv. Letter 13(5): 75-82, 88. Sept.-Oct. 1942. 99.9 P38S

Taper table outside bark for chestnut oak based on field measurements of 3,766 trees, collected from numerous sites and localities.

BUELL, JESSE H. Outside-bark form class volume tables for some southern Appalachian species. U. S. Forest Serv. Appalachian Forest Expt. Sta. Tech. Note 53, 76 pp., processed. Asheville, N. C., Oct. 1, 1942. 1.9 F7623T

Tables for 16 important species of the Appalachian and mid-Atlantic states giving tree volumes by several combinations of d.b.h. and merchantable height for a fixed "outside bark" form class, but providing for converting volumes to those for any other form class.

LEACH, WALTER. White pine plantations, thirty years after planting. Pa. Dept. Forests and Water. Serv. Letter 13(4): 63-66. July-Aug. 1942. 99.9 P38S

Information on the growth and behavior of stands of pine and other trees on 43,000 acres of old fields and barren areas in the State Forests as revealed by a study of permanent sample plot areas.

LEXEN, BERT. Sale of stumpage on the basis of tree measurement. Jour. Forestry 40(11): 845-853. Nov. 1942. 99.8 F768

Advantages, disadvantages and limitations of the tree-measurement method as used in the place of log scaling, with proposed improvements and a method of determining sampling error.

LOCKE, STANLEY S. The use of soil-site factors in predicting timber yields. Soil Sci. Soc. Amer. Proc. (1941) 6: 399-402. Literature cited. 56.9 So3

The evaluation of the yield of a specific timber type from a study of the principal soil-site conditions - soil characteristics, direction of slope, and degree of stocking - occurring within the forest type, with a table built up from the study showing approximate annual production in cubic feet per acre of an upland oak woodland in the upper Mississippi Valley.

LOSEE, S. T. B. Air photographs and forest sites; II. Application of aerial site mapping methods to areas in Saskatchewan and Quebec. Forestry Chron. 18(4): 169-181, illus. Dec. 1942. References. 99.8 F7623

The first article on this subject appeared in the Sept. issue of the Forestry Chronicle, pp. 129-144.

In the Pas Working Circle in Saskatchewan, six sites were described and mapped on a 900 square mile area. The Notakin Depot and Lake Edward areas in Quebec to which the general methods were adapted are representative of large areas in Quebec and New Brunswick.

RECKNAGEL, A. B., and WESTVELD, MARINUS. Results of second remeasurement of Adirondack cutting plots. Jour. Forestry 40(11): 837-840. Nov. 1942. 99.8 F768

Results of first cutting of five sample plots on mixed spruce-hardwood stands to determine the practicability of shortening the interval between cuts were presented in Journal of Forestry, October 1933, pp. 680-688. Tables and discussions in this issue show 1940 remeasurement data which provides information on the development of the stands following cutting.

FOREST RESOURCES

ALASKAN highway will develop many new forest areas. Canada Lumberman 62(23): 11-13, illus. Dec. 1, 1942. 99.81 C16

Sitka spruce of the Tongass National Forest in Alaska and the forests of Canada are made available by new highway. Extensive use of culberts, one of the newer applications of wood, has been carried out in the construction of this highway.

BADOUX, E. Un voyage d'étude dans les peupleraies vaudoises. Jour. Forest. Suisse 93(8/9-10): 176-186, 197-207, illus. Aug.-Oct. 1942. 99.8 J82

Description of a field trip into the Vaudois poplar plantations to study their condition, amount of resources, culture and utilization.

GONZÁLEZ-VALE, MANUEL. Recursos forestales de Venezuela; descripción succincta; su valor económico presente y probable futuro; su conservación. Amer. Sci. Cong., 8th, Washington, 1940. Proc. 5: 79-93, map. 1942. 330.9 Am3008

Forest resources of Venezuela showing the three, principal forest regions with the most important species growing in each, the main forest products of the country, the economic value of the forests, and the steps taken for their conservation.

HERR HITLER'S lumber problems. Amer. Lumberman no. 3245, p. 33. Dec. 12, 1942. 99.81 Am3

Poor transportation facilities and labor shortage are the main reasons for a lumber shortage in Germany. This shortage is not acute since Germany's most essential wood needs can be supplied for an indefinite length of time.

LOTTI, THOMAS, and EVANS, THOMAS C. Virginia's forests; a forest survey progress report. U. S. Forest Serv. Appalachian Forest Expt. Sta. Forest Survey Release 11, 76 pp., tables, processed. Asheville, N. C., Nov. 1, 1942. 1.9622 A3F76

Preliminary report prepared to furnish public and private forest enterprises with needed basic data, and the War Production Board with information on the volume, quality and availability of critical timber species in advance of more complete reports.

OLIVEIRA, EDMUNDO de. O que são e o que valem os sobreirais da Tunísia. Junta Nac. da Cortiça [Lisbon] Bol. 44, p. 7. June 1942. 309.9 J96

With a discussion of the resources of the cork groves of Tunisia, the author begins a comparative study of the cork resources of Portugal and the cork regions of the world. - From English summary, p. II.

U. S. FOREST SERVICE. Tables of basic timber statistics and basic forest land statistics for the four Columbia basin states, Washington, Oregon, Idaho, and Montana with segregations by subregions. 28 pp., processed. [Washington, D. C.] July 1938. 1.9 F76Ta

WHITE, WARREN T. Forest resources of South hold amazing potentialities for industry. Paper Trade Jour. 115(22): 49-50, 53-54, 56-57, illus. Nov. 26, 1942. 302.8 P196

Describes progress of the pulp and paper industry in the South and the contribution which it is making toward the establishment of a



sound forestry policy in that area. Timber resources, if properly conserved and managed, seem adequate not only for the present emergency but also for the opening of vast new fields such as those of plastics and synthetic fibres.

WISCONSIN. DEPT. OF AGRICULTURE. DIV. OF LAND ECONOMIC INVENTORY AND LAND USE. Forest plantations of Wisconsin. Wis. Dept. Agr. Div. Land Econ. Inventory and Land Use Bul. 232, 62 pp., illus. Madison, Oct. 1942. 2 W752Bu

Detailed study showing historical background, growth rate, and production of 50 forest plantations in Wisconsin, and pointing out that the more than 4 million acres of waste land could be producing likewise if planted in fully stocked stands of trees.

### LUMBERING

HAGEN, VICTOR W. VON. Mahogany gold. Amer. Forests 48(12): 539-542, 575, illus. Dec. 1942. 99.8 F762

Mahogany logging in the British Honduras by the skilful Miskito Indians.

LOG RULES of Scribner and Doyle. Amer. Lumberman no. 3245, pp. 34-35. Dec. 12, 1942. 99.81 Am3

History of the Doyle and Scribner rules dating back to the early 1800's centered in the territory surrounding Rochester, New York.

LUMBER industry in Pennsylvania. Pa. Dept. Forests and Waters. Serv. Letter 13(3): 52-54. May-June 1942. 99.9 P38S

History of the lumber industry in Pennsylvania from the period around 1800 when the primitive up-and-down sawmills were operating, through the 1860's when Pennsylvania became the leading lumbering state in the union, down to the 1900's when lumbering towns sprang up long enough to remove the wood from the forests.

PETTIFOR, CAROLINE B. Seasoning timber; effects of seasoning on the mechanical properties of timber. Wood 7(10): 177-179, illus. Oct. 1942. 99.82 W855

Work carried out as part of the program of the Forest Products Research Board.

SWEDEN. STATISTISKA CENTRALBYRÅN. Undersökning angående skogsavverkningen år 1937. Research inquiry concerning lumbering in 1937. Sweden Statis. Centralbyrån Statis. Meddel. Ser. A, 5(6): 1-89. 1940. 99.9 Su34

Statistical study based on reports from foresters on the species, the method of measuring and the importance of the woods cut during 1937, along with a study of the forestry tax.

TORGESON, O. W. The drying rate of sugar maple as affected by relative humidity and air velocity. U. S. Forest Serv. Forest Prod. Lab. R1264, 13 pp., illus., processed. Madison, Wis., Dec. 1940. 1.9 F761R

Presents data obtained in a series of kiln runs on the heartwood and sapwood of 1-by 8-inch sugar maple, considering the factors of original and final moisture content, sapwood or heartwood, temperature of kiln air, size of stock, relative humidity of kiln air, velocity of kiln air, and length of air travel.

TORGESON, O. W. Function and calculation of ventilation in drying compartments. U. S. Forest Serv. Forest Prod. Lab. R1265, 6 pp., illus., processed. Madison, Wis., Apr. 1941. 1.9 F761R

TORGESON, O. W. Simplifying the calculation of the quantity of air required in kiln drying lumber. U. S. Forest Serv. Forest Prod. Lab. R1266, 5 pp., illus., processed. Madison, Wis., Apr. 1941. 1.9 F761R

Explains the principal factors of air circulation, drying rate, and temperature drop which are involved in determining the effect of air circulation on drying rate. Presents a chart simplifying the theoretical calculations of any one factor when the others are given.

TORGESON, O. W. Technique of developing a drying process for small stock. U. S. Forest Serv. Forest Prod. Lab. R1263, 5 pp., pl., illus., processed. Madison, Wis., Sept. 1940. 1.9 F761R

Study made specifically to determine the drying procedure for handles made of cocobolo wood, a Central American product much used in the cutlery trade

TORGESON, O. W. Why the drying time of a kiln load of lumber is affected by air velocity. U. S. Forest Serv. Forest Prod. Lab. R1269, 5 pp., illus., processed. Madison, Wis., June 1941. 1.9 F761R

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. List of publications on the seasoning of wood. U. S. Forest Serv. Forest Prod. Lab. R446, 19 pp., processed. Madison, Wis., May 1941. 1.9 F761Ls

On experimental and applied kiln drying, physical properties, air drying and steam binding.

WALLNER, OSCAR. Accident risks in woods operations. Pulp and Paper Mag. Canada 43(12): 907-909. Nov. 1942. 302.8 P96

Translated from the first part of "Statistics on Accident Risks in Woods Operations" appearing in the January 1940 issue of the Swedish forest magazine, "Stogen." Presented in the interest of comparing woods accidents experience here with that in Sweden.

#### PRODUCTS UTILIZATION

BIG TIMBER construction. Amer. Lumberman no. 3245, pp. 30-32, illus. Dec. 12, 1942. 99.81 Am3

The advantages and increasing utilization of Teco construction and connector methods.

BUDD, CHARLOTTE R. Paper production mounts in the "other Americas". U. S. Dept. Com. Foreign Com. Weekly 9(10): 14-17. Dec. 5, 1942. 157.54 F763

Paper production in Latin American countries shows a gradual progress heightened by restrictions placed on imports during the war. In spite of having vast forested areas, this industry has not developed rapidly due to lack of water power, coal and iron, and to tropical dangers and other obstacles. Considers the progress of the industry by individual countries.



BUILDING a bomber from wooden tissues. Forests & Outdoors, Dec. 1942, pp. 364, 379, illus. 99.8 C16

Processes used in building a plastic-bonded plywood bomber, pointing out a few advantages in the use of plywood over aluminum.

CASCIANI, FERRI, and STORIN, GORDON K. The pH factor in the hypochlorite bleaching of woodpulp. Pt. IA. Single-stage treatment of sulphite pulp. (cont.) Paper Trade Jour. 115(21): 27-31. Nov. 19, 1942. Literature cited. 302.8 P196

CONSTRUCTION details of new Ryan plywood army plane. Wood Prod. 47(11): 14-16, illus. Nov. 1942. 99.82 W856

New plastic-bonded plywood military primary trainer, forward step in the almost complete elimination of strategic materials in military aircraft.

De LONG, GEORGE CASS. The uses and production of tung oil. Jour. Geog. 41(8): 309-312. Nov. 1942. Bibliographical footnotes. 278.8 J82

Growth of tung and utilization of tung oil with emphasis on tung production in the United States.

FADELL, FRED E. New prefabricated hutments used by army air corps. Miss. Val. Lumberman 73(49): 10, illus. Dec. 4, 1942. 99.81 M69

Insulation board is used in construction of prefabricated, portable 16 by 16 foot hutments to protect men and machines against temperature factors from Alaska to Africa.

GERRY, ELOISE. Radial streak (red) and giant resin ducts in spruce. U. S. Forest Serv. Forest Prod. Lab. R1391, 6 pp., illus., processed. Madison, Wis., Aug. 1942. 1.9 F761R

Description of two abnormalities in spruce in comparison with the structure of more normal wood, presented particularly for a study of wood used in aircraft construction.

GHOSE, T. P., and VAF A, B. S. Synthetic tall oil. Indian Forester 67(8): 395-398. Aug. 1941. 99.8 In2

Possibilities of the production and utilization in India of the oily by-product obtained during the chemical pulping of pinewood by the alkali-sulphate process.

HARLOW, WILLIAM M. Lost in the woods! How to carry on. Forests & Outdoors, Dec. 1942, pp. 369-370. 99.8 C16

On food, beverages, cordage, and drugs found in the woods, a knowledge of which may be useful in wartime.

HERRICK, GEORGE. Plywood parts and assemblies for aircraft.

Veneers and Plywood 36(12): 6-7. Dec. 1942. 99.82 V55

Two major factors restrict the use of plywood; lack of facilities for fabrication of molded plywood products and lack of men with experience and training in the eccentricities of different species of wood and different bonding agents.

IMPORTANCE of wood in the war industry. South and World Affairs 4(9): 20. Nov. 1942. 280.8 So87

Usefulness of mahogany and balsa from Central and South America to the war industry.

JENSEN, VICTOR S., and DESMOND, RICHARD C. Northeastern lumber production in 1941. U. S. Forest Serv. Northeast Forest Expt. Sta. Tech. Note 53, 1 p., processed. New Haven, Conn., May 8, 1942. 1.9 F7622T

Table shows preliminary results of a census of the lumber industry in New England and New York.

JOHNSON, R. P. A. Wood tanks. U. S. Forest Serv. Forest Prod. Lab. R1285, 17 pp., illus., processed. Madison, Wis., Apr. 1942. 1.9 F761R

Records preliminary data for determining the technical requirements that must be met by wood materials for the tank market. Shows species and grade of wood used and requirements of tanks to contain food products, beverages, textiles, tanneries, soap, cleaning fluids and candles and water.

LUMBER'S war job. Amer. Lumberman no. 3245, pp. 18-27, illus. Dec. 12, 1942. 99.81 Am3

Some of the many ways in which the Army and Navy have used 18 billion board feet of lumber in 1942 such as for torpedo boats, sub chasers, mine sweepers, glued laminated units for keels and ribs, warehouses, barracks, hospitals, bridges, housing, truck bodies, shipping containers, sawdust chips used in camouflage, pipes and planes, with some indications of changes in utilization for 1943.

MILLARD, RUTH. Wooden toys; war is bringing them back. Amer.

Forests 48(12): 546-548, illus. Dec. 1942. 99.8 F762

MILLIONS of feet of lumber can be salvaged from abandoned buildings. Calif. Lumber Merchant 21(10): 20-21. Nov. 15, 1942. 99.81 C12

Describes the salvage activities of one lumber dealer in the Middle West who was able to obtain supplies of staple stock from old buildings.

MORRILL, GEORGE E. Lumber production in West Virginia in 1941.

U. S. Forest Serv. Appalachian Forest Expt. Sta. Tech. Note 54, 5 pp., map, processed. Asheville, N. C., Oct. 1, 1942. 1.9 F7623T

NEUBRECH, W. LeROY. Pulp and paper industry undergoing transition to a war economy. U. S. Dept. Com. Dom. Com. 30(23): 17-20, 22. Dec. 3, 1942. 157.54 D713

Steps in the curtailment of paper and pulpwood production in the United States and Canada with a discussion of the effects upon the industry.

NORRIS, CHARLES B. Technique of plywood. 249 pp., illus. Seattle, Wash., I. F. Laucks, inc., 1942. 99.77 N79

Reprint of a series of articles published in the "Hardwood Record", March 1937 to July 1939.

OBJECTIVES, functions and personnel of Lumber and lumber products division of the War Production Board. South. Lumber Jour. 46(12): 14, 19, 84. Dec. 1942. 99.81 So8

PULP and paper in 1941. Canad. Chem. and Process Indus. 26(11): 653. Nov. 1942. 381 C16

Statistics for the Canadian pulp and paper industry show a 12.3 per cent increase in production over 1940 records.

SCHMITZ, HENRY. The forests go to war. No. Amer. Wildlife Conf. Trans. 7: 94-98. Washington, D. C., American wildlife institute, 1942. 412.9 N814

Points out the contribution that the mature stands of timber in the national forests can make to the war effort, the desirability of discontinuing the use of high quality wood where that of low quality is sufficient, and the necessity of preparing for a postwar period in forestry.



SIECKE, E. O. Importance of wood in war effort. Tax. Prog. 1(4): 6-7, 25. Oct. 1942. 280.8 T313

Output of forest products in Texas, uses of wood in wartime, and the activities of the Texas Forest Service.

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. List of reference works on pulp and paper. U. S. Forest Serv. Forest Prod. Lab. R564, 10 pp., processed. Madison, Wis., May 1941. 1.9 F7611r

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. Partial list of uses of forest products in substitutions for steel and tin. U. S. Forest Serv. Forest Prod. Lab. R1289, 7 pp., processed. Madison, Wis., Feb. 1942. 1.9 F761R

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. Wood flour; a general statement of the manufacture and use of wood flour and the status of the industry. U. S. Forest Serv. Forest Prod. Lab. R565, 5 pp., rev., processed. Madison, Wis., 1941. 1.9 F761R

Last paragraph, p. 5, lists other sources of information on wood flour.

UPSON, ARTHUR. The tree does a wartime job. Wooden Barrel 11(3): 4-5, 12-13. Nov. 1942. 99.82 W854

The downward trend in lumber production is due to many factors, of which the major ones having corrective measures applied to them are labor, equipment, prices and unused mill capacity. Means of reducing lumber consumption by eliminating waste, substituting suitable species for others in demand, and other ways are under consideration by the Lumber and Lumber Products Branch of the War Production Board.

WOOD propelled automobile attracts wide interest. Amer. Forests 48(12): 571. Dec. 1942. 99.8 F762

Further details of the wood-gas automobile or "gasogene" tested by the Forest Products Laboratory. Earlier report given in American Forests 48(11): 521. Nov. 1942.

WOODEN boxes playing dual roles in timber conservation campaign. Wooden Box and Crate 3(1): 24-25. Jan.-Feb. 1941. 99.82 W857

Boxes made of by-product grade of lumber serve as containers for portable water pumps used to put out forest fires.

#### WOOD PRESERVATION

BAECHLER, R. H. Determination of nickel and copper chromates and nickel, copper, and magnesium arsenates in treated wood. U. S. Forest Serv. Forest Prod. Lab. R1260, 5 pp., processed. Madison, Wis., Mar. 1941. 1.9 F761R

FLORIDA plant among first to fireproof wood. South. Lumber Jour. 46(12): 40. Dec. 1942. 99.81 S08

Gainesville wood-preserving plant of American Lumber and Treating Co. distributes its fireproof products to the Navy.

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. Fire-retarding paints. U. S. Forest Serv. Forest Prod. Lab. R1280, 4 pp., processed. Madison, Wis., Dec. 1941. 1.9 F761R

The amount of protection to be expected from fire-retardant formulations and the information available on the properties of such preparations.

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. Making log cabins endure; suggestions on preservatives, chinking, and exterior and interior finishes. U. S. Forest Serv. Forest Prod. Lab. R982, 12 pp., processed. Madison, Wis., revised Feb. 1941. Literature cited. 1.9 F761R

Although this publication does not present a complete discussion of log cabin design or details of construction, a number of references relating to design and construction are included in list of literature cited.

#### WOOD TECHNOLOGY

BARBER, R. W. Physical properties of laminated plastics. Mech. Engin. [New York] 64(12): 888-890. Dec. 1942. 291.9 Am3J

Chart accompanying article shows physical properties of laminated plastics with paper base, wood base, fabric base, glass-cloth base, and high-strength paper base.

BROWNE, F. L. Painting hardwoods in farm buildings. U. S. Forest Serv. Forest Prod. Lab. R1291, 3 pp., processed. Madison, Wis., Mar. 1942. References. 1.9 F761R

Divides hardwoods into groups from the point of view of painting, and gives information on methods of painting.

CARLSON, T. A. Box makers to play vital war role. Wooden Box and Crate 4(1): 8-9, 24-25. Jan.-Feb. 1942. 99.82 W857

Lists four groups into which the Forest Products Laboratory has classified wood for container construction, not because of the superiority of one group over another, but because of property similarities for nailing purposes.

CHIDESTER, G. H., and McGOVERN, J. N. Sulfite pulp from lowland white fir. U. S. Forest Serv. Forest Prod. Lab. R1404, 9 pp., illus., processed. Madison, Wis., June 1942. Literature cited. 1.9 F761R

Experiments in using heartwood and sapwood sections of lowland white fir for pulping.

CHIDESTER, G. H., and McGOVERN, J. N. Semichemical and sulfite pulping experiments and production of semichemical corrugated board from red gum (*Liquidambar styraciflua*). U. S. Forest Serv. Forest Prod. Lab. R1415, 8 pp., tables, processed. Madison, Wis., Aug. 1939. Bibliographical footnotes. 1.9 F761R

HANSON, FRED S. Ethyl alcohol from sulphite waste liquor. Paper Trade Jour. 115(24): 37-40. Dec. 10, 1942. Literature cited. 302.8 P196

Presented at the Fall Meeting of the Technical Association of the Pulp and Paper Industry, Boston, Mass., Sept. 29-Oct. 1, 1942.

Reviews the technological and economic aspects of manufacturing alcohol from sulphite waste liquor.

KATZEN, RAPHAEL, MULLER, R. E., and OTHMER, D. F. Destructive distillation of lignocellulose. Chem. & Metall. Engin. 49(11): 174-175. Nov. 1942. 381 E12

Names sources of various products from lignocellulose compounds.



KAUFERT, F. H., and BEHR, E. A. Susceptibility of wood to decay; effect of urea and other nitrogen compounds. Indus. and Engin. Chem. Indus. Ed. 34(12): 1510-1515. Dec. 1942. Literature cited. 381 J825

Laboratory studies concerning the rate of decay and susceptibility to decay of southern pine sapwood, Douglas fir heartwood, red oak heartwood, and cypress heartwood when treated with urea and ammonia compounds.

KELLER, E. L., and McGOVERN, J. N. Sulfite pulping of Engelmann spruce. U. S. Forest Serv. Forest Prod. Lab. R1408, 11 pp., illus., processed. Madison, Wis., July 1942. Literature cited. 1.9 F761R

Study undertaken to bring similar experiments made 25 and 35 years ago up to date. It includes the preparation and evaluation of the pulp, some experiments using a shortened cooking time, and a comparison of Engelmann spruce and white spruce prepared under similar conditions.

McGOVERN, J. N., and CHIDESTER, G. H. Semichemical and sulfite pulping experiments, and production of corrugating boards from blackjack oak. U. S. Forest Serv. Forest Prod. Lab. R1414, 7 pp., tables, processed. Madison, Wis., May 1939. 1.9 F761R

Pulping of blackjack oak by the semichemical process revealed that "high sodium sulfite and bicarbonate concentrations appeared to be necessary in the impregnation liquors ... especially if low yield pulps are to be obtained."

McGOVERN, J. N., and CHIDESTER, G. H. Sulfite digestions of western white pine. U. S. Forest Serv. Forest Prod. Lab. R1412, 10 pp., tables, processed. Madison, Wis., Jan. 1940. 1.9 F761R

Pulping experiments showed a similarity of behavior between western white pine and jack pine.

McGOVERN, J. N., and KELLER, E. L. Sulfite pulps from several southern hardwoods. U. S. Forest Serv. Forest Prod. Lab. R1409, 8 pp., illus., processed. Madison, Wis., July 1942. References. 1.9 F761R

Investigation of the preparation and properties of pulps from southern cottonwood (*Populus deltoides virginiana*), black willow (*Salix nigra*), and sugarberry (*Celtis laevigata*).

PATTERSON, RALPH F. New wealth from a river of waste. Forests & Outdoors, Dec. 1942, pp. 359-360. 99.8 C16

Uses made of chemical components of wood, cellulose and lignin, and discussion of research needed in field of lignin plastics and in production of vanillin from waste sulfite liquor of lignin.

SCHAFER, EARL R., and PEW, J. C. Grinding and newsprint paper experiments on southern sugarberry, ash, cottonwood, willow, and elm. U. S. Forest Serv. Forest Prod. Lab. R1410, 4 pp., tables, processed. Madison, Wis., Mar. 1942. 1.9 F761R

"Of the three hardwood species, cottonwood appeared first, green ash second, and sugarberry third in relative suitability for groundwood pulp to be used in newsprint paper."



SCHAFER, EARL R., and PEW, J. C. The grinding of Engelmann spruce for newsprint and magazine quality mechanical pulps. U. S. Forest Serv. Forest Prod. Lab. R1407, 4 pp., tables, processed. Madison, Wis., Jan. 1942. Bibliographical footnotes. 1.9 F761R

Comparative grinding characteristics of Engelmann spruce and white spruce for newspaper and magazine quality pulps.

SCHAFER, EARL R., and PEW, J. C. The grinding of hardwoods; studies on swamp tupelo, paper birch, green ash, sugarberry, southern cottonwood, black willow, and American elm. U. S. Forest Serv. Forest Prod. Lab. R1419, 16 pp., tables, processed. Madison, Wis., Aug. 1942. Literature cited. 1.9 F761R

Investigations show that for many purposes a satisfactory groundwood can be made from hardwoods with less energy than is ordinarily used in the grinding of softwoods, and that some hardwoods yield more pulp per cord than that obtained from softwoods.

SCHAFER, EARL R., and PEW, J. C. The grinding of paper birch and use of pulp in newsprint and toweling papers. U. S. Forest Serv. Forest Prod. Lab. R1411, 6 pp., tables, processed. Madison, Wis., Jan. 1942. Bibliographical footnotes. 1.9 F761R

Groundwood produced with comparatively low energy consumption per ton from paper birch can be used in toweling and newsprint papers up to 25 and 35 percent respectively.

U. S. FOREST SERVICE. FOREST PRODUCTS LABORATORY. Relation of moisture content and drying rate of wood to relative humidity of atmosphere. U. S. Forest Serv. Forest Prod. Lab. R509, 9 pp., rev., processed. Madison, Wis., May 1941. 1.9 F761R

Information as to how the relative humidity outdoors and indoors affects the moisture content of wood, with a brief, technical discussion of atmospheric humidity and how it may be accurately determined.

WILSON, T. R. C. Wood bending, October 1929, with appendix (1941) on Apparatus for bending boat ribs. U. S. Forest Serv. Forest Prod. Lab. R966, 21 pp., pl., illus., processed. Madison, Wis., 1941. 1.9 F761R

Paper presented at the Annual Meeting of the Wood Industries Section, American Society of Mechanical Engineers, Rockford, Ill., October 1929, dealing with the requirements of bending apparatus and manipulation, their importance and the necessity for correctness to avoid breakage losses.

Appendix presents a detailed description of apparatus developed at the Forest Products Laboratory in 1941.

WOOD-WASTE utilization. Forestry Abs. 4(2): 71-77. 1942.  
241.01 Im7

Contents: I. The chemical utilization of wood waste, by W. G. Campbell, pp. 71-73; References, p. 73. II. The utilization of sawdust and shavings, by P. Harris, pp. 74-77; Bibliography, pp. 76-77.



RANGE MANAGEMENT

PICKFORD, G. D. Light use and range management. Cattleman 29(7): 41-43. Dec. 1942. 49 C29

Thirty three years of successful experience by a cattleman of Washington State in conservative grazing and judicious range management following rotation and deferment practices as well as a decrease in stocking.

SAGREIYA, KAMTA P. The livestock problem of the province vis-a-vis grazing. Cent. Prov. and Berar [India] Forest Dept. Bul. 2, 37 pp. Nagpur, 1940. 99.9 C331

Regulation of grazing in the reserved forests, pp. 29-37.

Religious obstacle to the slaughter of cattle, insufficiency of wholesome fodder, defective breeding, and other factors are causes of the livestock problem in the Central Provinces and Berar.

SAUNDERSON, MONT H. Economic aspects of land conservation. Amer. Cattle Prod. 24(6): 9-10, 12, 14, 16-17. Nov. 1942. 49 P94

Discusses management problems of the western grazing lands, particularly of the Great Plains, emphasizing controlled grazing and the probable necessity of public regulation for adjusting range management.

WILDLIFE

GRAHAM, SAMUEL A. The integration of fur and timber production. No. Amer. Wildlife Conf. Trans. (1942) 7: 456-462. Washington, D. C., American wildlife institute, 1942. 412.9 N814

Interspersion in logging, natural variations, and other accidental or successional changes tend to make forest areas ideal living places for wildlife. Shows the practicability of combining fur and timber production based on knowledge of the Great Lakes Region, but applicable practically anywhere.

O'ROKE, EARL C. Fur bearers; a neglected source of forest revenue. No. Amer. Wildlife Conf. Trans. (1942) 7: 451-456. Washington, D. C., American wildlife institute, 1942. 412.9 N814

Shows that the variety and interspersed of ages and types of forest and nonforest cover can be made into favorable fur producing regions, and discusses the advantages of harvesting timber lands for both forest and fur production.

REEKS, W. A. Notes on the Canada porcupine in the maritime provinces. Forestry Chron. 18(4): 182-187. Dec. 1942. References. 99.8 F7623

Feeding habits of Canadian porcupines cause considerable damage to trees in localized areas, partly offset by some good habits. Den poisoning and use of the bounty system are discussed as control measures.



